IT ENVIRONMENT
It's time to get more eco-friendly, Mark Hall says. See On the Mark on **PAGE 10** and his editorial on **PAGE 20.**

PHISH FRY
PayPal CISO Michael Barrett talks about fighting phishers. **PAGE 8**

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DuPont Data Theft Shows Insider Risks

Scientist downloaded thousands of documents without being detected

BY JAIKUMAR VIJAYAN

Gary Min worked as a scientist at DuPont for 10 years, focusing on research involving a type of high-performance film. He also covertly used DuPont's computer systems to steal trade secrets valued at more than $400 million shortly before joining a rival company.

Min's case, the details of which were unsealed last week by the U.S. attorney's office in Delaware, is the latest — and perhaps most extreme — example of the dangers posed to corporate data by rogue insiders.

INSIDE
A bank in the U.K. gets fined $1.9M for losing a laptop. Global Dispatches, Page 18

According to the court records, Min pleaded guilty in November to stealing proprietary data from DuPont by illegally downloading or ac-

DuPont Data, page 16

Customers Courted With Web 2.0

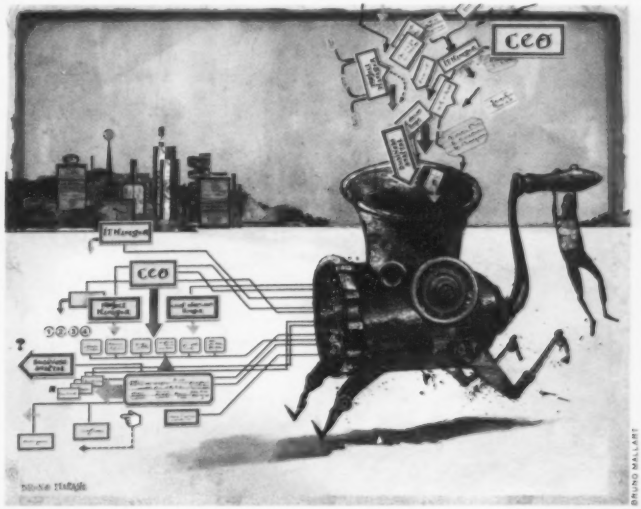
Social networking inspires marketers

BY HEATHER HAVENSTEIN

Portland Trail Blazers fans quickly took advantage of the professional basketball team's brand-new social networking Web site last week to lobby for power forward Zach Randolph to be selected to play in yesterday's NBA All-Star game.

The Trail Blazers hope the site, which signed up 2,500 registered users in the first three business days after its Feb. 9 launch, can also help management better communicate with the team's fans — and sell more tickets, said Art Sasse, the team's vice president of communications. The

Social Nets, page 36



Reinventing IT

SPECIAL REPORT

Alignment isn't good enough anymore. **IT leaders are becoming full-fledged business strategists. Read how** IT departments, IT budgeting and even the IT career ladder **are being reconceived to meet new demands.**

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NEWSPAPER

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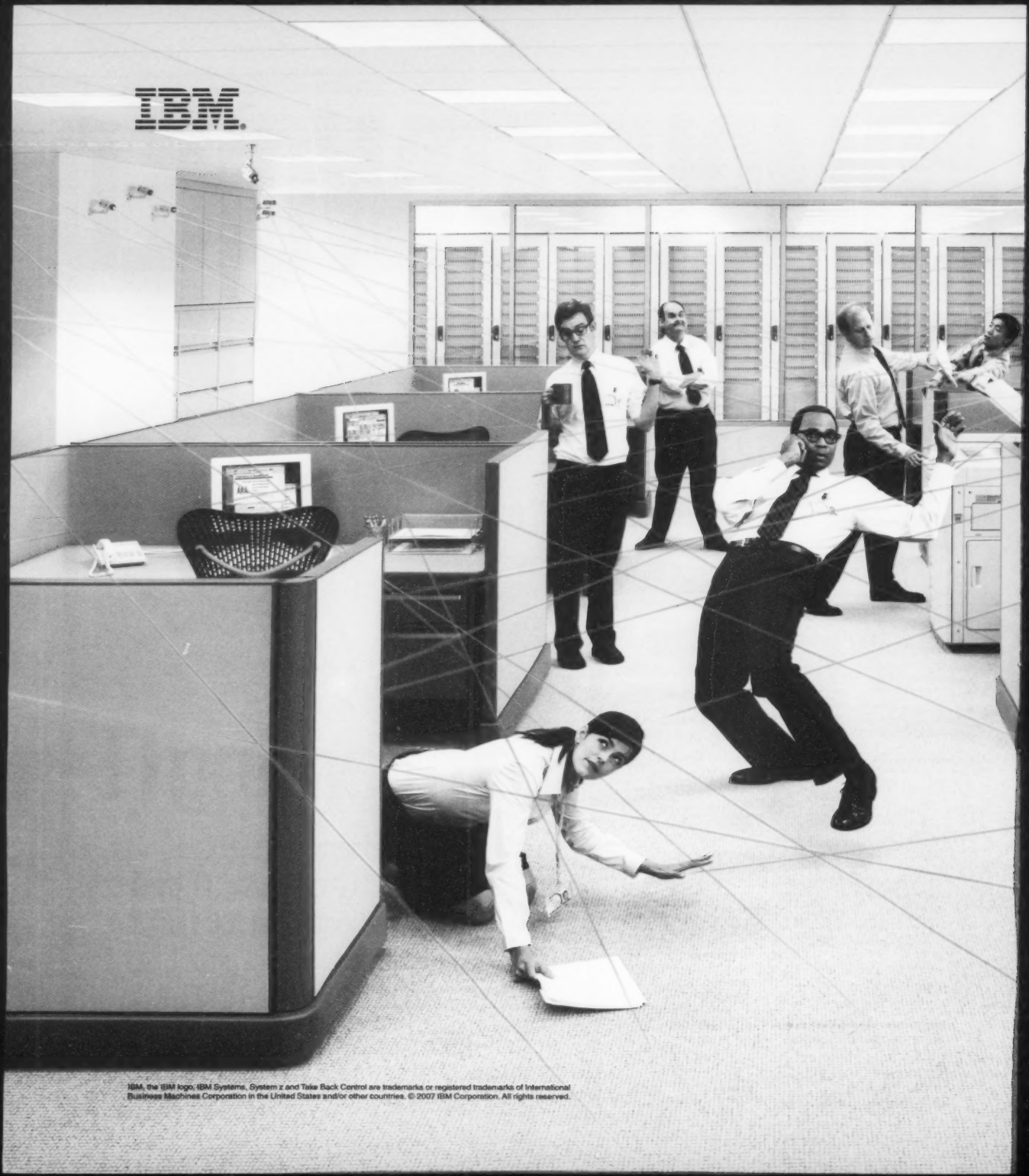

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_INFRASTRUCTURE LOG

_DAY 25: Our ad hoc security solutions are out of control. They're too difficult to manage. We're leaving ourselves vulnerable and exposed.

_Gil's had a security epiphany: high-powered lasers. They're everywhere. I keep zapping myself as I type.

_DAY 26: I've taken back control with the IBM System z™ mainframe. It helps us centralize our security management. Identity and access controls help protect our information from internal and external threats. And the System z's multilevel security features—along with its integrated hardware encryption—give us the highest levels of protection for our data and transactions.

_That's great. But it won't bring back my left sideburn.

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8 Q&A: PayPal exec Michael Barrett says phishing attacks are the top security issue facing the online payment service.

8 IT workers need to make developing "soft skills" a priority, say speakers and other attendees at the Share user group conference.

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Microsoft's efforts to fast-track its Open XML document format within the ISO — and why everyone else in IT has a real stake in the outcome.

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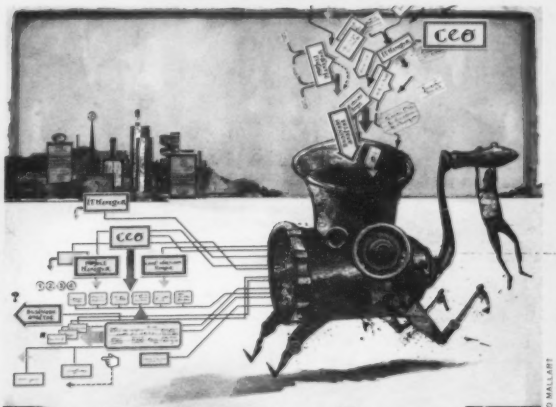

BRUNO MALLART

Reinventing IT

SPECIAL REPORT

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24 Reimagining the IT Department. IT leaders are completely transforming their IT organizations, and everything is up for radical change. Also, learn how to spread the word about IT's new structures and expanded roles.

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30 Revitalizing Staff Skills. A focus on business alignment and a shift to a services economy mean IT careers are changing. And, from smart money management to inside-out knowledge of the business, here are five old-school skills for the New Age CIO.

32 Opinion: Business Is Business. Only in rare and obvious cases should IT be run like a business, argues columnist Mark Hall. Those who think otherwise, he says, are unrealistic ideologues.

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The 2007 Mobile CPU Road Map

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www.computerworld.com/hardware

Reach Out in Vista

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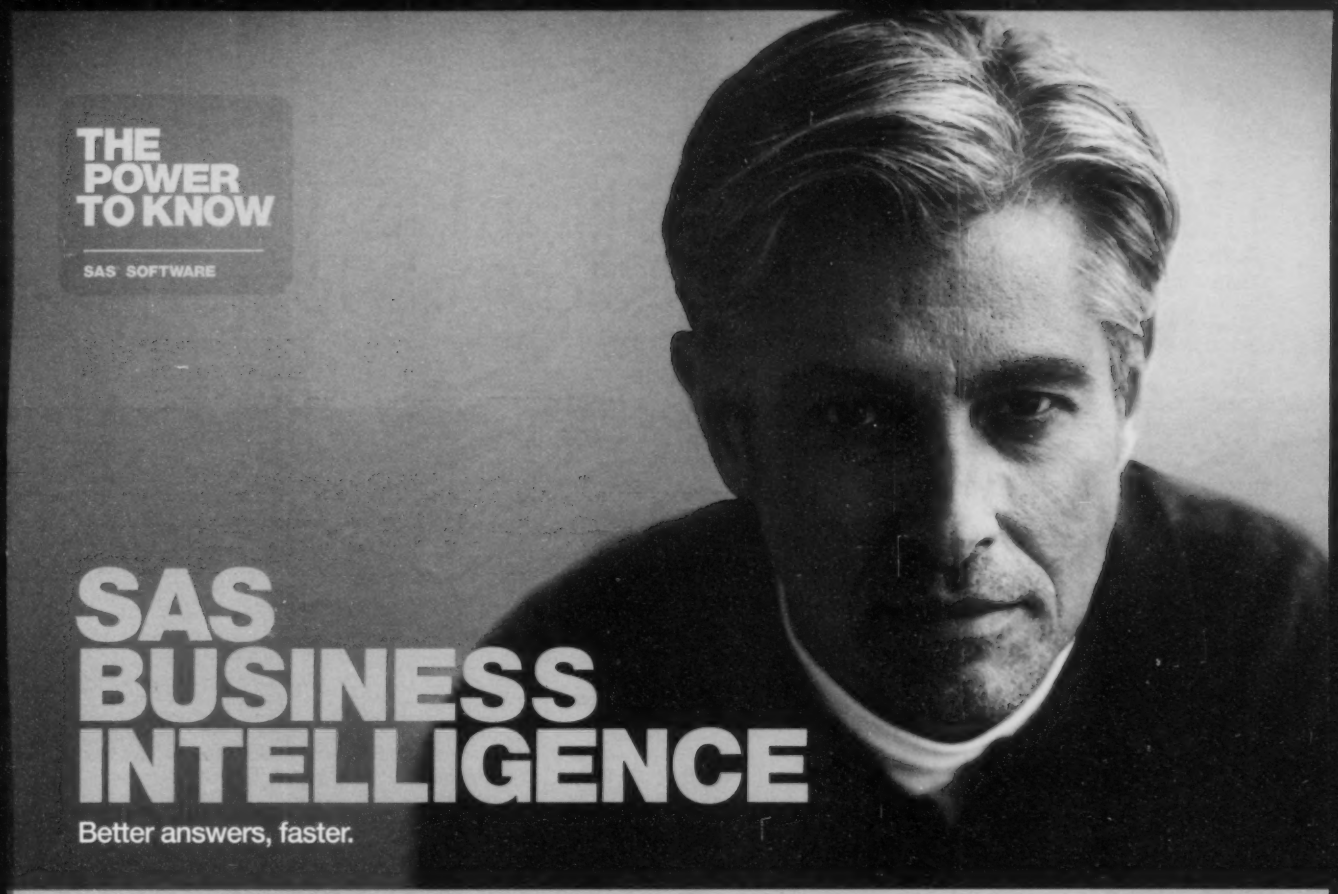

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AT DEADLINE

Ballmer Tempers Vista Projections

Microsoft Corp. CEO Steve Ballmer told analysts last week that their sales forecasts for the company's new Vista operating system may be "overly aggressive." In a conference call, Ballmer said lower selling prices, limited new corporate sales and software piracy may temper Vista sales. He didn't provide specific sales projections for the fiscal year ending July 1.

FTC Files Pretexting Complaint in Florida

The Federal Trade Commission has asked a federal court to force two Florida companies – including one linked to Hewlett-Packard Co.'s illegal efforts to plug leaks from board members to reporters – to stop telephone pretexting and to pay back victims of the practice. The complaint charged Action Research Group Inc., which was linked to the HP scandal, and Eye in the Sky Investigations Inc. with pretexting, or lying to gain access to personal telephone records.

Microsoft Discloses New Word Flaw

One day after its monthly patch release, Microsoft acknowledged that an unpatched bug in its Word application is being used by hackers to commandeer computers. The bulletin included patches for 20 vulnerabilities, including six for Word. The company said the unpatched flaw in Word 2000 and 2002 could allow an attacker to execute arbitrary code. Microsoft did not disclose a patch delivery date.

Dell Taps Solectron CEO for New Post

Dell Inc. has hired Michael Cannon, president and CEO of electronics maker Solectron Corp., to head a new group that will oversee much of the company's operations. The appointment comes about two weeks after Kevin Rollins stepped down as CEO and was replaced by founder and Chairman Michael Dell.

Web Use Spike in Pandemic May Make Telework Tough

Expected surge in online traffic could lead to usage restrictions, planners say

BY PATRICK THIBODEAU

MANY COMPANIES and government agencies are counting on legions of teleworkers to keep their operations running in the event of an influenza pandemic. But those plans may quickly fall apart as millions of people turn to the Internet for news and entertainment, potentially choking online traffic.

Such a surge in usage would almost certainly prompt moves to restrict or prioritize traffic, such as blocking video transmissions, according to business continuity planners who attended a pandemic forum at a SunGard Data Systems Inc. hot-site facility in northern New Jersey this month.

Both businesses and home users likely would be asked to restrict high-bandwidth transmissions, the planners said. And if that didn't work, they warned, government action might well follow.

"Is there a need for a YouTube during a national emergency?" asked John Thomas, vice president of enterprise systems at a large New York-based financial institution that he asked not be identified.

Businesses and government agencies could cope with traffic surges on their networks by using redundant communications systems and techniques such as diverse routing. But that might not help teleworkers or customers and business partners trying to access systems remotely.

"I think it's definitely the most vulnerable part of the equation," said Bernard O'Neill, vice president and chief network officer at Prudential Financial Inc. in Newark, N.J.

Companies with an eye on the bottom line may balk at paying telecommunications service providers for dedicated lines and other business-class capabilities in preparation for a problem that may never occur. But waiting could be a risky strategy. For instance, if the World Health Organization raises its pandemic threat alert from the current level of Stage 3 on its six-stage scale, demand for backup communications services could outstrip vendors' ability to provide them, said forum participants.

For pandemic planners, nothing can be taken for granted. Elizabeth Byrnes, a continuity planner at AT&T Inc., was asked how the telecom company would handle a hurricane or another secondary problem if one were to occur during a pandemic. Byrnes said the issue has received consideration within AT&T.

Byrnes said AT&T would be able to meet its customer service-level agreements in a pandemic but acknowledged that there are unknowns. For instance, the company has identified critical employees who would be asked to come into the office during a pandemic, she said. But there's no way of knowing in advance how people will react. "Will they come in? I don't know," Byrnes said.

A pandemic could also threaten the Internet and corporate networks in other ways. George Johnson, founder and chief technology officer at The ESP Group LLC, an application service provider in Arlington, Va., said that increased numbers of teleworkers may expose networks to security risks. "If you're going to ask people to work from their home computer," Johnson said, "how reliable is that?"

Pandemic Preparations

Participants in the SunGard forum said companies should do the following:

- Perform scenario planning that includes the possibility of business operations losing access to the Internet.
- Make plans to limit employee and customer access to high-bandwidth apps.
- Prepare for a heightened risk of cyberattacks.
- Weigh the cost of buying backup telecommunications services now vs. waiting and perhaps paying exponentially more if a pandemic strikes.

DHS Nixes RFID for Border Program

BY MARC L. SONGINI

The Department of Homeland Security is abandoning plans to use radio frequency identification technology in a key part of its border security system, after RFID tags failed to work as expected in a 15-month test.

A spokeswoman for the border security program said the DHS is now "exploring alternatives," such as biometric technologies, for tracking foreign visitors as they pass through checkpoints when they exit the U.S.

The DHS tested the RFID technology in an effort to improve its U.S. Visitor and Immigration Status Indicator Technology (US-VISIT) program, which was created by Congress in January 2004 to track foreign nationals within the U.S.

The spokeswoman said the department had hoped that the RFID technology could be used to automate and speed up the process of getting an accurate record of foreign visitors as they leave the country.

DHS Secretary Michael Chertoff disclosed the failure of the technology on Feb. 9 in testimony to the Homeland Security Committee of the U.S. House of Representatives. He cited a Government Accountability Office report released on Jan. 31 that found the RFID test to be a failure as a result of performance and reliability problems.

Points of Failure

The DHS tested the technology at five entry points on the Canadian and Mexican borders, the program spokeswoman said. RFID tags were embedded on select I-94 immigration documents, which show an immigrant's country of origin and legal status in the U.S.

The RFID-tagged documents were to be scanned as the visitors passed through a border crossing, and their exit from the country was to be recorded in a DHS database.

The GAO report found that during a one-week period at a test site, only 14% of 166 RFID tags that crossed the border were read by scanners. The DHS had set a goal for the test of reading 70% of tagged documents crossing the border.

Rod McDonald, CIO of U.S. Customs and Border Protection, said he hopes RFID technology can still be used in some part of the US-VISIT program.

"Unfortunately, the pilot was unsuccessful at reaching a reasonable read rate," he said. "We're still interested in RFID, but we have to look for some alternative."

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PayPal Makes Drying Up Phishing Holes a Priority

Security exec details steps payment company is taking to stop e-mail scams

BY JAIKUMAR VIJAYAN

With 133 million users of its online payment service worldwide, PayPal is arguably one of the most recognizable Internet brands — and one of the most frequent targets of phishing attacks as well. **Michael Barrett,** *chief information security officer at the eBay Inc. unit, spoke with* Computerworld *last week about the phishing problem and PayPal's multipronged strategy for handling it. Excerpts follow:*

Why do you think PayPal is targeted so much by attackers? Actually, there are two reasons. One is we have a very large customer base by the standards of most companies — 133 million customers on a global basis. We also have a business model that makes it easy by design to move money around between those 133 million individuals. By definition, that's going to make both us and our customers targets.

What's your biggest security challenge right now? The most significant issue is phishing. Phishing definitely is something we hear [about] loud and clear from our customers. They want us to take that away, and we're working very actively on addressing that. We don't believe it's a problem that there is a single silver bullet for. We also think it's an industry problem. In fact, quite a lot of what we're trying to do is link the industry in coming up with a solution.

So, what are you doing to fight the phishers? Basically, what we're doing is taking a broad-brush strategy. Sometimes people say — and I don't subscribe to this belief — that spam is an uncontrollable problem. If you mean, can you catch every bit of spam and phish mail, that is probably very difficult to achieve. But can you deal with it such that you see very little spam and very little phish mail? I would submit [that] technically, we already know how to do that. I just think that by and large, we haven't put the controls in front of the consumers.

What sort of controls do you mean? A couple of years ago, there was a lot of discussion in the industry about digitally signing e-mails on their way out of corporations like ours. And then there was a standards war, and essentially all the momentum got lost. We've decided that it's time again for somebody to take a leadership position. We are, in fact, completely agnostic about what drives standards. As it stands, there are two perfectly functional ones: SPF and DomainKeys. We're ready 100% to start signing all outbound e-mail from [eBay and PayPal] using both SPF and DomainKeys.

We [also] are working with the major ISPs and giving them permission [to delete] a piece of e-mail that claims to originate from us but is not legitimately signed by us. I think that by the end of this year, we actually will have done that with several ISPs. The other thing we're doing is finding ways of working with the e-mail client vendors to make it much clearer when e-mail has been legitimately signed or not.

What about the strong authentication initiative PayPal announced last year? It's just now running out in a public beta in the U.S., Australia and Germany. We want to see what our customers think about it. We're giving the [security] tokens away for free to our [business accounts]. We're charging a nominal $5 fee for the others. We aren't making any money on it, but we do need to cover our shipping and handling costs. We also believe it's important to show that these tokens have a value.

Besides the tokens, what are some of the other security measures that you're using to try to mitigate online fraud? We already do quite a bit of fraud modeling, some of which is behavioral and some of which is IP-based. We generally don't talk a lot about the details simply because it's proprietary and the more we talk about it, the more information we give to our adversaries.

Suffice it to say that we already have extensive security controls. Our fraud rate is fourtenths of 1%. If you go look up average numbers in the credit card industry, [they're] a whole lot higher than that.

The last thing we do is work very closely with law enforcement on a global basis. While we have a great deal of grudging respect for the intelligence and determination of our adversaries, we ultimately want to see them in handcuffs and orange jumpsuits. ▸

Tech Pros Take 'Soft' Approach in Workplace

IT expertise shouldn't eclipse people skills, conference attendees say

BY PATRICK THIBODEAU
TAMPA, FLORIDA

Repeated efforts at Nationwide Mutual Insurance Co. to try Linux on the mainframe faced internal opposition, some of it from IT employees worried that a mainframe-based server consolidation would be a threat to their jobs. They "fought tooth and nail to keep it from happening," said James Vincent, a mainframe systems engineering consultant at Nationwide.

But their resistance taught Vincent a lesson that he put to use after the Linux project was finally approved in 2005. Part of Vincent's job involved working with the employees who had feared the project, including IT staffers who worked on Unix systems.

"At first blush, they feel you are taking away their jobs from them," Vincent said at last week's Share user group conference here. But as a result of the earlier battles, he developed a better sense of the concerns that the Linux opponents had. And Vincent said that with "kinder words," he helped convince them "that this is the right path to take."

The experience that Vincent gained is an example of what Share speaker George D'Iorio called "soft skills" — a term he used to describe the abilities needed for tasks such as developing effective relationships with co-workers and vendors and running meetings.

D'Iorio manages the enterprise server team at a large retailer that he asked not be identified. As he did at last week's conference, D'Iorio also conducts training sessions, such as one called "Getting Your Message Across."

> **"You need to be able to talk at all different levels. You aren't just talking in a peer relationship, engineer to engineer."**
>
> DONALD WOODRUFF, IT CONSULTANT, NATIONAL GRID USA

"Effective communication is a necessary skill in any kind of leadership, whether technical leadership or people leadership," he said. "And I think sometimes the professional skills [in IT] are so much focused on the technology that the other soft skills get overshadowed."

Communication Matters

D'Iorio thinks that developing better interpersonal skills within an IT operation can help improve its productivity and efficiency. He said that one thing his employer does to help sharpen such skills is hold "lunch and learns," where various IT workers give presentations about a particular aspect of their jobs or a project that they're involved in.

Effective communication is something Donald Woodruff, an IT consultant at utility company National Grid USA in Westboro, Mass., tries to practice on the job. He said one technique he uses is to establish "checkpoints," which involves periodically making sure that the person he's explaining a technical concept to understands it before advancing the discussion.

"One of the most difficult issues for technical people is communication," said Woodruff. "You need to be able to talk at all different levels. You aren't just talking in a peer relationship, engineer to engineer. You have to be able to explain yourself."

Nationwide began running Linux-based applications on the mainframe a year ago and currently has about 1,500 in place, Vincent said. That is helping check the growth of the Columbus, Ohio-based insurer's installed base of 6,000-plus servers, and it expects to save a total of about $15 million over three years.

In addition, the Unix group has gotten more comfortable with the IT changes, according to Vincent. It has reached the point, he said, where Nationwide's Unix and mainframe staffers "are now part of the Linux/Unix team." ▸

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BRIEFS

Microsoft, Novell Extend Agreement

Microsoft Corp. and Novell Inc. have announced plans to enable virtualization for each other's server operating systems as part of their ongoing effort to improve interoperability between Windows and Linux. Under the updated plan, Microsoft Virtual Server 2005 R2 Service Pack 1 will let users host Novell's SUSE Linux Enterprise Server 10 as a virtualized guest.

Dell Laptop Said to Cause House Fire

A fire that destroyed a single-family home in Biddeford, Maine, last week has been blamed on a Dell laptop that was plugged in and left sitting on a living room couch while recharging. A representative for Dell Inc. could not be reached for comment. The laptop was reportedly not among the computers recalled last year for battery problems that could cause overheating and fires.

Sun Patches Critical Bug in Solaris 10

Sun Microsystems Inc. last week patched a critical bug that could let hackers snatch control of Solaris 10 systems by sending simple commands to the Telnet daemon. The fix came just three days after exploit code for the zero-day vulnerability was posted to a security Web site. "Big round of applause for Sun owning up to the mistake and fixing it quickly," said Dave Maynor, chief technology officer at security vendor Errata Security, in a blog entry.

Oracle Updates TimesTen Database

Oracle Corp. has unveiled the first major revision of the TimesTen in-memory relational database since it acquired the technology in June 2005. The new version, Release 7, offers increased integration and caching with the enterprise-level Oracle Database 10g. Pricing for TimesTen 7 starts at $12,000 per CPU.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW FAULKNER

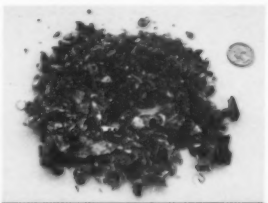
Software Helps Save Trees . . .

. . . while saving your company some green. A tiny start-up in Portland, Ore., has a simple idea that could help your organization pocket a few extra greenbacks while conserving the planet's resources: Stop wasting printer paper. Hayden Hamilton, the founder of GreenPrint Technologies LLC, says his company's eponymous "virtual printer" previews print jobs and identifies the pages that the software deems wasteful. Of course, you choose whether it's waste or not. And there is lots of waste — URLs dangling from printed Web pages, endless legal folderol, the boilerplate on press releases and more. All of which gets printed and tossed, wasting paper and money. Hamilton cites a study by Lexmark International Inc. that estimated that corporations waste an average of 1,400 sheets of paper per year. Another bit of research from Citigroup Inc. puts the cost of each tossed sheet at 6 to 13 cents, depending on how your company counts paper, ink, toner, recycling and garbage costs. By his conservative calculation of 8,333 sheets per 40-foot tree (low, but not the lowest of many estimates), Hamilton concludes that use of GreenPrint by all U.S. office workers could save millions of trees and countless millions of dollars annually. GreenPrint is available on Windows XP, with a Vista version due at the end of this quarter and one for the Mac to follow. The software includes a PDF writer and starts at $35.

Let's save a few trees, HAMILTON suggests.

Dispose of your IT assets with . . .

. . . environmental and budgetary care. If you work at one of the 30% of midsize-to-large companies that Gartner Inc. says don't have any IT asset-disposal programs, consider chatting with Chris Adam, the director of NextPhase a Peabody, Mass.-based division of IT component distribution company Converge. NextPhase manages the disposal of your IT assets — and it might even give you a check in return. According to Adam, NextPhase will erase data to Level 3 Pentagon standards, "sanitize" the asset so it can't be tracked back to you and then remarket the device or harvest the components and recycle what it can't sell. The revenue it generates from an asset determines whether and how much of a check NextPhase will send your way. The company's new NextPhase Asset Manager is an online service that lets you track each asset's status within its "chain of custody," says Adam.


A disk drive that NextPhase shredded.

Do you give . . .

. . . good meeting? With so many meetings becoming virtual these days, Genesys Conferencing Inc. in Vienna, Va., thought it would be helpful if attendees of Web-based meetings got a personality assessment so they could perform better during online group encounters. So it teamed up with Michael Santo, a co-developer of the Rembrandt Portrait, a predictive personality profile tool. Santo's company, Empowerment Concepts Inc. in Palm Springs, Calif., markets the tool to human resources departments. The result is the Genesys Meeting Profile, a 15-minute psychological survey to help determine things such as whether a person behaves more like an introvert or an extrovert. The profile, Santo says, can be "a virtual coach" and help people understand how to act during online business meetings. For example, if you are a dominating type, the profile can give you pointers on how to seek the views of others in an online session, where the usual interpersonal cues can be lacking. Genesys is conducting a test to see if there are differences in assessments of a meeting's effectiveness by people who have been profiled and people who have not. Results will be available by the end of Q1.

Know thy meeting self, advises SANTO.

Use Eclipse to merge old middleware . . .

. . . with new apps. Peter Marquez, vice president of marketing at eCube Systems LLC in Montgomery, Texas, observes, "Middleware is generally a good thing, but there are gaps and shortcomings in middleware that can make applications brittle." That becomes particularly true when you try to marry middleware-laden programs with newer ones designed around a service-oriented architecture, he says. To do it right, you need a tool, he claims. Hence the planned early March debut of eCube's NXTware 2.0. Marquez argues that young developers are accustomed to graphically rich tools, such as wizards, that help them code. He says NXTware brings that modern programming environment to doddering middleware applications. An Eclipse plug-in, NXTware lets developers manage the entire application development process from within the open-source framework. That includes CORBA, remote procedure call and other middleware code as well as modern techniques such as SOAP and enterprise service buses. Pricing starts at $299 per seat.

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Presidential Campaigns Tread Carefully Into Web 2.0 World

Slips by John Edwards' bloggers show candidates' risk of offending voters

BY HEATHER HAVENSTEIN

PRESIDENTIAL candidates have discovered that being on the Web means more than posting a few glitzy pictures, speech transcripts and an "e-mail me" link.

Hoping to tap into the popularity of Web 2.0 applications such as blogs and widely used social networking sites like MySpace and YouTube, several candidates are gravitating toward such technology to garner support and raise money.

At the same time, campaign officials acknowledged that such efforts are not without substantial risk. For example, pushing the limits of Web 2.0 technology, such as opening blogs for quick, public postings, could lead to unwanted or libelous posts, analysts said.

A firestorm of criticism aimed at Democratic presidential hopeful John Edwards this month was cited as a strong example of why campaigns must advance carefully. After two of his campaign's bloggers made comments that some thought were anti-Catholic, Edwards first criticized the blogs but didn't fire the bloggers. However, the criticism mounted, and both women resigned from the campaign last week.

One of those bloggers, Amanda Marcotte, wrote in her blog that she resigned because "every time I coughed, I felt like I was risking the Edwards campaign." The other blogger, Melissa McEwan, said she resigned because she had become a liability to the campaign.

Most campaigns are struggling with "how do you leverage Web 2.0 and true communities online while maintaining some control over your candidate," said Julie Barko Germany, deputy director of the Institute for Politics, Democracy & the Internet at George Washington University. "[Campaigns] want to be able to influence how people perceive their candidates."

Sen. Barack Obama is among the many candidates who are embracing Web 2.0 tools to attract supporters, garner support and raise money.

Thus, she said, most campaigns will post carefully crafted messages themselves instead of allowing unfettered external comment. "The race to the White House in 2008 will be all about how candidates talk to people online," Barko Germany added.

Edwards announced his second presidential run with a video on the YouTube site, and his Web site includes links to personalized pages on the YouTube, MySpace and Facebook social networking sites — and even Flickr, a site for sharing and organizing photos.

Sen. Hillary Clinton (D-N.Y.) officially announced the start of her presidential campaign on her Web site, which she said also plans to launch a blog.

On Feb. 10, Sen. Barack Obama (D-Ill.) formally announced his presidential run in a speech delivered in Springfield, Ill., but a day earlier, he had posted a video touting his new social networking plan on his campaign Web site.

In that video, he urges supporters to use the site to organize fundraisers, create blogs and "organize your friends, your neighbors and your networks. We can collect small donations instead of having to rely on large campaign contributions," Obama said.

Obama's campaign office did not reply to a request for comment.

David Kimball, associate professor of political science at the University of Missouri – St. Louis, said candidates can use Web 2.0 tools to meet and contact likely supporters, raise money and attract volunteer workers.

However, he noted that the protests prompted by the Edwards bloggers highlight that "if you're not careful, you can end up being associated with unpopular views, since the Web is more of a venue of unfiltered discussion."

Both major parties have acknowledged that the Republican National Committee has better exploited IT in past elections to help its candidates.

However, this year, the sites launched by some of the Republican presidential candidates, including Sen. Sam Brownback (R-Kan.) and former Massachusetts Gov. Mitt Romney, so far lack substantial social networking features.

Advocacy Groups Call for E-voting Changes

BY GRANT GROSS
WASHINGTON

A coalition of voting rights groups last week called on the U.S. Congress to pass legislation requiring that electronic voting machines have printers attached to ensure that election results can be audited.

Speakers at last week's Elections Looking Forward forum, sponsored by Common Cause, the Leadership Conference on Civil Rights and other advocacy groups, also sought solutions to other problems related to the failure of e-voting machines to meet expectations in recent elections.

Those speakers cited a lack of training for poll workers and administrative mistakes as causes of e-voting problems.

> **Sarasota was a disgrace. Eighteen thousand votes inexplicably disappeared into cyberspace.**
>
> **RALPH NEAS,** PRESIDENT AND CEO, PEOPLE FOR THE AMERICAN WAY

Efrain Escobedo, director of voter engagement at the National Association of Latino Elected and Appointed Officials, said his group noticed that poll workers didn't know how to change the paper in machines or how to reboot e-voting machines.

Several called on Congress to pass the Voter Confidence and Increased Accessibility Act, which would require paper-trail printouts with all touch-screen voting machines.

Rep. Rush Holt (D-N.J.) introduced the bill earlier this month after a similar piece of legislation failed to pass during the previous congressional session. The Holt bill has 183 co-sponsors — almost half of the membership in the House of Representatives.

Congress needs to act in the next six to eight months for the legislation to affect the 2008 elections, said Ralph Neas, president and CEO of People for the American Way, a Washington-based liberal advocacy group.

In calling for passage of the legislation, Neas pointed to the 2006 vote in Sarasota County, Fla., where e-voting machines did not record votes from more than 18,000 people in a congressional race decided by fewer than 400 votes.

"Sarasota was a disgrace," Neas said. "Eighteen thousand votes inexplicably disappeared into cyberspace."

Christina Galindo-Walsh, senior staff attorney for the National Disability Rights Network, argued against requiring a paper trail, contending that the printouts would create a two-tier voting system in which some disabled people wouldn't have access to the same information as other voters.

Moreover, Galindo-Walsh and Jim Dickson, vice president for government affairs at the American Association of People with Disabilities, maintained that it is already too late for Congress to mandate paper-trail ballots by the 2008 presidential election. E-voting machine vendors wouldn't be able to produce enough printers in time, Galindo-Walsh said.

The problems have forced many Americans to question the accuracy of e-voting systems, said Melanie Campbell, executive director and CEO of the National Coalition on Black Civic Participation. "The reality is voters are losing confidence in the system," Campbell said.

Gross is a reporter for the IDG News Service.

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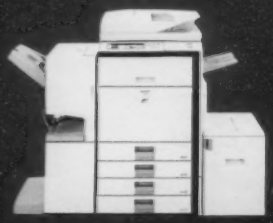

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BRIEFS

IBM Servers Support Linux Consolidation

IBM has unveiled three servers designed to help companies consolidate Web-tier Linux servers in their IT environments. The high-end offering, the IBM System p5 560Q, includes advanced virtualization features that allow 320 x86-based Linux Web servers to be consolidated on one rack carrying five of the new servers. IBM has updated its blade server technology for Linux server consolidation for small and midsize businesses.

EBay Adds Tools, APIs for Developers

EBay Inc. plans to add more programming tools for external developers in an effort to increase the volume and variety of applications created for eBay users. The company said it will provide developers with new software development kits and application programming interfaces. The eBay Developers Program has about 45,000 members.

Open-Source Group Eyes Interoperability

Ten small open-source companies have founded a consortium to push for more interoperability between open-source business applications. The Open Solutions Alliance plans to define tools, frameworks and best practices to ease interoperability. It also hopes to establish communities to work on specific projects, as well as facilitate joint marketing campaigns for open-source business applications.

Microsoft Ships Add-on for BI Tools

Microsoft Corp. has unveiled Dynamics CRM Analytics Foundation, which is designed to make it easier for users to customize its business intelligence software. The bundle of customizable source code and documentation is available now at no charge to users of Microsoft's customer relationship management software. It includes sample code and prebuilt templates.

E-discovery Rules Send Message on Archiving

Users turn to software for storing and retrieving e-mails, instant messages

BY ERIC LAI

With its early embrace of Linux and its highly reliable online banking site, KeyBank NA is among the most efficient, cutting-edge banks in the U.S. when it comes to IT — but that wasn't the case in one area until recently.

When Al Coppolo was asked by lawyers at the KeyCorp operating unit to produce old e-mails for litigation or regulatory compliance, he would have as many as four members of his IT team trudge to an offsite storage facility to retrieve tapes, mount them on servers and painstakingly search for the requested messages.

"It was a completely manual environment," said Coppolo, executive vice president and director of infrastructure at Cleveland-based KeyBank. "Sometimes we would have to look through copies of the same e-mail on multiple tapes if there were multiple replies."

The process was so laborious and time-consuming that his team just barely met a 30-day internal deadline for producing e-mails. And, Coppolo noted, the number of legal requests was only growing. Moreover, in December new federal e-discovery rules went into effect that spell out requirements for submitting electronic documents as evidence in civil court cases.

Automating the Process

There are several technology alternatives available to companies looking for help. KeyBank opted for a full-blown archiving and content management system from AXS-One Inc., installing the software late last year to support a 300TB e-mail archive.

The bank bought AXS-One's namesake software from Sun Microsystems Inc. as part of a compliance and content management product bundle. AXS-One can manage both e-mail and instant messages, and it captures a copy of each message that is sent or received. To give users one-click access to old messages, it creates message "stubs" in their e-mail directories.

Coppolo said the tools are working well enough that he hopes to eventually train KeyBank's legal team to use AXS-One in order to free up his IT staffers for other tasks.

The increased need for companies to be able to produce electronic evidence is "a pretty serious issue," said Michael Osterman, an analyst at Osterman Research Inc. in Black Diamond, Wash.

And many companies don't appear to be ready to comply with the e-discovery rules. For example, in a survey conducted by *Computerworld* last fall, 32% of the 170 IT managers and staffers who responded said their companies weren't at all prepared to meet the new requirements.

Archiving systems such as AXS-One are good for large companies with e-mail indexes that bulge out to "Google-like sizes," Osterman said. A less-costly alternative, he noted, is to add search and retrieval software to existing e-mail servers.

A third route is to swap out one of the first-tier mail servers for a less expensive product with more built-in search and storage features. That's what the city of Marshalltown, Iowa, did in December, when it moved from Novell Inc.'s GroupWise to a Linux-based e-mail server from PostPath Inc.

William Lawyer, Marshalltown's information systems coordinator, said PostPath stores e-mails so they can be easily managed and searched.

"We don't have a monolithic database with all sorts of post office files to deal with," he said. "PostPath just stores each mail as an individual file."

Vista Avoiding Bugs, Microsoft Exec Claims

BY ROBERT McMILLAN
SAN FRANCISCO

***Ben Fathi** is corporate vice president of development in Microsoft Corp.'s Windows core operating system division. In an interview with IDG News Service at the RSA Conference 2007 here this month, Fathi discussed Microsoft's operating system security plans and the number of bugs being found in Windows Vista. Excerpts follow:*

What's going to be the big security story this year? What we've done in previous OS releases and in Vista, and what our security partners are doing, has treated security as a defensive measure. It's a way of stopping people from attacking you. What we want to do now is move to a world where we enable and simplify collaboration between different individuals by making sure that those connections are end to end, [and] that you can provide very fine-grained control over the people, the applications and the resources that you give access to.

So, what are you doing to make that happen? There's a number of things we're working on. For example, isolation. We [currently] look at isolation in terms of network isolation, whether it's IPsec or putting in firewalls or SSL VPNs. What we want to do is provide a better layer of isolation at the operating system level. We're looking at putting hypervisors underneath the operating system and building a hardware root of trust on the machine.

What that means is that today, if a rootkit makes it onto your machine, it can do a hyperjacking. It can take over the OS, or it can even get underneath the OS so that any software you're running won't know that it's being lied to by a piece of malware. What we want to do is put the hypervisor there and use things like the [Trusted Platform Module] chip to make sure that the entire boot path is protected and secure and that we can trust it.

Are you surprised by the number of Vista bugs that have been reported since the launch? I made a statement six or nine months ago that I would like to see half as many vulnerabilities as Windows XP [had] in the first year. Obviously, I'd like less than that — I'd be happy with zero. But I think it's reasonable to say, given the additional complexity and the additional size of Vista, that half as many would be a great goal. Am I surprised with the number [so far]? No, I think it's been a relatively small number of vulnerabilities in the three months we've been out.

And given the fact that we proactively went out to the Black Hat conference [last August] and handed out copies, and that a couple million people have been using Vista in test versions for the past year or so, that tells me there are already hackers out there trying to attack it. So given that there are less than a handful of vulnerabilities discovered, I think that's good progress.

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Continued from page 1

DuPont Data

cessing thousands of documents stored in an electronic library. Min, who also uses the first name Yonggang, is scheduled to be sentenced March 29 and faces a maximum of 10 years in prison plus a fine of up to $250,000.

What happened at DuPont vividly shows how trusted insiders can exploit IT weaknesses, as well as the challenges that companies face in stopping people from misusing systems, said Matt Kesner, chief technology officer at law firm Fenwick & West LLP in Mountain View, Calif.

User-by-User Security

"The old security model looked at the castle and ways to protect it with perimeter defenses," Kesner said, noting that it made "intuitive sense" to many IT and security managers to implement firewalls, intrusion detection systems and other defenses aimed at preventing outsiders from breaking in. But that model is inadequate for dealing with insider threats, Kesner said.

"Frankly, we all have to actively stop thinking of insider vs. outsider" and focus on improving access controls for all users, he said. "It means looking at each and every person and machine as an island and deciding what rights and access each person and machine needs or doesn't need."

According to the information released last week, Min downloaded about 22,000 document abstracts from DuPont's Electronic Data Library (EDL) server and accessed another 16,700 full-text PDF files. The various documents covered most of the company's major products and technologies, including some that were still in the research and development stage.

The illegal activity occurred during a five-month period just prior to Min's departure from DuPont in December 2005, the U.S. attorney's office said. When the downloading began that August, Min was in active job discussions with Victrex PLC, a company based in Thornton Cleveleys, England, that he signed on with in October 2005 but didn't join until the following January.

> **"Frankly, we all have to actively stop thinking of insider vs. outsider."**
>
> **MATT KESNER,** CTO, FENWICK & WEST LLP

Although Min downloaded or accessed about 15 times more documents than the next-heaviest user of the EDL did during the period in question, his activities appear to have gone unnoticed until after he submitted his resignation.

At that time, an internal investigation uncovered his activities, and DuPont reported the downloads to the FBI and the U.S. Department of Commerce. Even so, Min was able to upload another 180 DuPont documents onto a Victrex-supplied laptop a full month after he had left DuPont.

No details were disclosed on what prompted the internal probe or about how or from where Min was able to access DuPont data after he had left the company.

The U.S. attorney's office said DuPont contacted Victrex officials in the U.K. and told them of the theft of the 180 documents, after which Victrex seized the laptop it had given to Min and handed the system over to the FBI.

A subsequent raid of Min's home in Ohio on Feb. 14, 2006, uncovered several computers that contained confidential DuPont information. Federal agents also found numerous garbage bags that were filled with shredded DuPont technical documents, plus evidence that documents had been burned in a fireplace.

As the agents entered the house, Min launched a software erasure program on one of the computers in an attempt to destroy the contents of its hard drive, the U.S. attorney's office said.

A statement issued by DuPont last week commended the U.S. attorney's office and the other federal agencies involved in the investigation for their "leadership and professionalism" in dealing with the issue. It added that the data Min accessed doesn't appear to have been disseminated. A DuPont spokesman declined to comment on the case beyond the statement.

Downloads of thousands of documents by scientist Gary Min went unnoticed until after he resigned from DuPont.

"What happened at DuPont is not surprising at all," said Phil Neray, vice president of product management at Guardium Inc., a database security tools vendor in Waltham, Mass. Neray said the apparently unfettered access that Min had to the data on DuPont's EDL server is evidence of the lack of monitoring that's typical inside corporate networks.

"The objective should be to give insiders as much access as they need but no more," Neray said. That involves the use of monitoring mechanisms that detect unusual activity and send out alerts when it occurs, such as when a user attempts to download large volumes of information, he added.

IBM Unveils First Major FileNet Release

BY CHINA MARTENS

IBM last week unveiled FileNet P8 4.0, the first major new release of the enterprise content management software since IBM bought FileNet Corp. last October for $1.6 billion.

The new version of the software adds a J2EE-based content engine and content federation services for third-party repositories so that a company can carry out searches, classification, storage, updates and deletions of data stored in multivendor content stores, IBM said.

Such data federation is vital, since it's "impossible" for a major company to store all of its content in a single repository, said Steve Mills, senior vice president of IBM's software group, during a conference call last week.

Some large organizations have as many as 20 different content stores, he noted.

The FileNet software also allows users to capture, manage, access and join content from across their operations, IBM said. The new version can also automate records management tasks, making it easier for companies to meet compliance requirements, according to IBM.

Document Management

Franklin Alvarez, manager of computer applications and construction services at Consolidated Edison Company of New York Inc., a 35-year IBM customer and a 15-year user of FileNet's software, said he expects to benefit from their consolidation. "We were very happy to see the two come together," he said. "It gives us real synergies to leverage."

The utility company began deploying FileNet's P8 system in late 2004 to automate many manual content management functions. Con Edison was looking to ease the process of transferring data between the company and government agencies.

Alvarez's unit is responsible for the excavation work required for laying new electricity cables or gas pipelines in New York and for repairing existing systems there. Such tasks require constant communication with multiple city agencies to obtain work permits.

The utility is also keen to use the FileNet system to provide more content, such as layouts of systems and compliance specifications, to its workers at excavation sites.

Con Edison uses the business process management piece of the FileNet software to capture knowledge from its aging workforce, Alvarez said. "Our company is cradle to grave," he said. "It's not uncommon for someone to work here for 30 to 40 years."

During the teleconference, IBM also debuted a new Web 2.0 interface for its Content Manager OnDemand software. The interface will enable users to access content held in all of IBM's content management offerings via a Web browser.

Mills wouldn't comment on whether the vendor plans to add to its stable of content management offerings via more acquisitions. He did note that he expects the company to continue acquiring companies at its current rate of about a dozen per year.

Mills said that IBM plans to bring out content management offerings targeting small and midsize customers at some point. "We're already reaching into the middle and have some skinnied-down products," he said.

Martens is a reporter for the IDG News Service.

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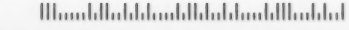

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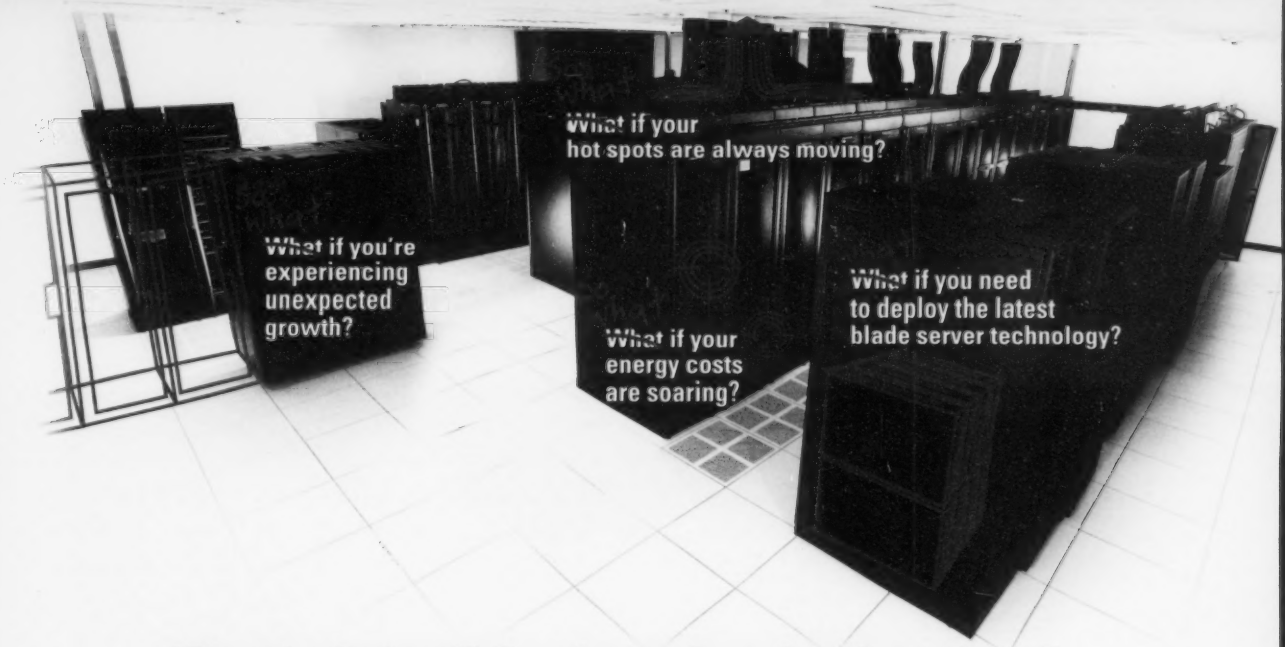

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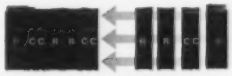

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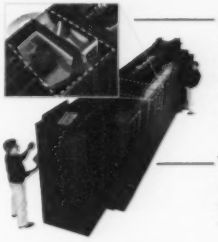

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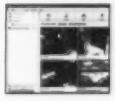

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GLOBAL DISPATCHES

An International IT News Digest

U.K. Bank Fined For Loss of Laptop

LONDON

THE U.K.'S financial services regulator last week fined a major British bank for its loss last summer of a laptop computer containing confidential customer information.

The Financial Services Authority fined Swindon, England-based Nationwide Building Society £980,000 ($1.9 million U.S.) for "failing to have effective systems and controls to manage its information security risks," the FSA said in a statement.

The laptop was stolen from an employee's home during a burglary in August, Nationwide said in a statement. The bank said that it believes the thief was after the laptop rather than the information stored on it.

The data was compiled for marketing purposes and did not contain any personal identification numbers, passwords or account balance information, the company said.

Nationwide, which has about 11 million customers, did not immediately realize that the stolen laptop contained customer information and waited three weeks before starting an investigation, according to the FSA.

Nationwide said that it has informed its customers of the problem and that no losses have been reported. It also commissioned a review of its information security, the FSA said.

■ JEREMY KIRK, IDG NEWS SERVICE

GLOBAL FACT

100.2M

Total number of mobile phone service subscriptions in Japan as of Jan. 31. The number represents about 78% of Japan's population of 127.8 million.

SOURCE: TELECOMMUNICATIONS CARRIERS ASSOCIATION OF JAPAN

Eight Arrested in China For Alleged Virus Plot

BEIJING

CHINESE POLICE have arrested eight people in connection with the release of a computer virus known as Panda Burning Incense, according to an official state news report.

The arrests are the first in China for virus writing, according to the Beijing-based Xinhua News Agency.

Li Jun, 25, from Wuhan in central China, was among those arrested, the official news agency reported. Li allegedly sold copies of the worm to 120 people, earning 100,000 renminbi ($12,876 U.S.), the agency said, citing a statement from the Hubei Province Public Security Bureau.

Antivirus specialist Sophos PLC in Abingdon, England, last month described Panda Burning Incense as a "parasitic virus" that infects executable files on a PC.

When an executable file is infected, its icon changes to an image of a panda holding three sticks of incense — a traditional way of praying in China.

In a statement, Sophos said the virus doesn't pose a risk of widespread infection because the altering of the icons makes the infection obvious.

■ SUMNER LEMON, IDG NEWS SERVICE

Korean Security Vendor Inks Mexican Deal

SEOUL

SOUTH KOREAN antivirus software maker AhnLab Inc. has taken another step in its effort to expand its business beyond Asia by striking a deal with a big Mexican bank.

Under the $550,000 (U.S.) deal, Seoul-based AhnLab will supply online antivirus, keyboard security, antispyware and online firewall applications to Banco Nacional de México SA. The Mexico City-based bank, which was acquired by New York-based Citigroup Inc. in 2001, claims to have about 1,500 branches and 2 million customers.

In a statement, AhnLab officials said the deal allows the bank to establish a strategic base to expand its business into South American countries.

AhnLab noted that it made its first move into the European market last year when it appointed a dealer in the Netherlands.

■ MARTYN WILLIAMS, IDG NEWS SERVICE

Taiwan Firms Warned On Export Restrictions

TAIPEI

THE TAIWANESE government has warned local companies that they can't export to Iran or North Korea electronics components that could be used to make military equipment.

Violators of the policy could face jail time if officials believe they intentionally tried to export sensitive items, or if they made repeated attempts to export such goods, said James Wu, deputy director general of Taiwan's Bureau of Foreign Trade.

The Taiwanese government could also cancel or suspend a company's export license for failure to comply with the ban, he said.

"We have had a few cases recently where customs officials have caught sensitive products that were to be exported and told the companies that they needed to gain permission to export such items to these countries," Wu said. "None of those items got past customs."

The list of controlled items includes consumer electronics devices such as computers, laser printers and optical disc drives, as well as industrial products such as silicon wafers and manufacturing robots.

Last year, after talks with U.S. officials, the Taiwanese government increased the number of sensitive products to 542 items, from about 300.

■ DAN NYSTEDT, IDG NEWS SERVICE

EC Seeks Input on Internet Buying Rules

BRUSSELS

THE EUROPEAN Commission has proposed a review of rules designed to protect consumers buying goods and services on the Internet, with some officials dismissing the current set as ineffective.

The EC earlier this month began a three-month public feedback period, seeking input from consumer groups and retailers.

Only a fraction of European Union consumers — 6%, according to the EC — currently shop online with companies based in other countries. In a statement, the EC acknowledged that the low rate of cross-border shopping is partly due to language issues, but it also said the lack of coherent rules for online transactions is to blame.

The goal of the effort, the commission said, is to create a single, simple set of rules that can boost consumer confidence in the EU market.

"Europe risks lagging behind," Meglena Kuneva, EU commissioner for consumer affairs, said at a press conference in Brussels. "Complex rules are holding back the next generation of bright business ideas."

■ PAUL MELLER, IDG NEWS SERVICE

Compiled by Mike Bucken.

Briefly Noted

Australia's Department of Immigration and Citizenship signed a four-year contract worth $44.2 million Australian ($34.6 million U.S.) with CPS Systems, a provider of electronic border management systems. The deal calls for the agency to continue using the Sydney, Australia-based company's Electronic Travel Authority and Advance Passenger Processing systems. CPS has supplied security tools to the Australian government for 11 years.

■ SANDRA ROSSI, COMPUTERWORLD AUSTRALIA

Vodafone Group PLC, a Newbury, England-based telecommunications vendor, last week said it can terminate its agreement to buy a majority stake in Hutchison Telecommunications International Ltd. for $11.1 billion (U.S.) if a "prohibition" threatens the deal. The Vodafone statement, included in a filing with the Hong Kong stock exchange, comes amid reports that Mumbai, India-based Essar Group, which holds a 33% stake in Hong Kong-based Hutchison Essar Ltd., is unhappy with some terms of the deal.

■ JOHN RIBEIRO, IDG NEWS SERVICE

Verizon Communications Inc. has agreed to sell its 28.5% stake in CA Nacional Teléfonos de Venezuela to Venezuela's government for about $572 million (U.S.). Verizon is selling the stake because of the country's effort to nationalize its industries and resources.

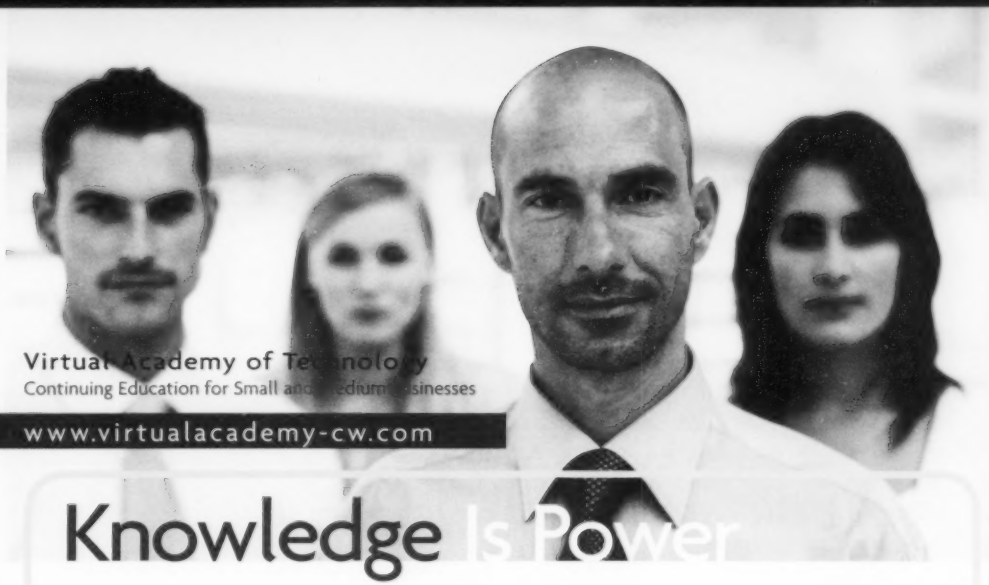
■ STEPHEN LAWSON, IDG NEWS SERVICE

Satyam Computer Services Ltd. in Hyderabad, India, announced that it is setting up its largest development facility outside of India. The 2,500-seat facility in China's Nanjing Software Park will open within a year. In November, Satyam announced plans to increase its staff in China from around 400 to about 3,000 by 2008.

■ JOHN RIBEIRO, IDG NEWS SERVICE

Ingres Corp. last week signed a global sales and marketing alliance with Satyam Computer Services. Under the agreement, Satyam will establish an Ingres practice focused on providing systems integration services to government, retail and pharmaceutical customers worldwide. Ingres, a provider of open-source database technology, opened operations in India in October.

■ CHINA MARTENS, IDG NEWS SERVICE



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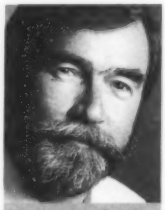
MARK HALL

E-waste Not

UNLESS you've been summering in Antarctica, in which case you experienced the phenomenon firsthand, you've seen the news coverage indicating that global warming is now considered a serious issue. Scientific studies, such as the prestigious and conservative Intergovernmental Panel on Climate Change 4th Assessment Report released two weeks ago, point to human activity as an undeniable contributor.



MARK HALL is a *Computerworld* editor at large. Contact him at **mark_hall@computerworld.com.**

Even Doubter-in-Chief President Bush mentioned global warming concerns in his State of the Union address last month. It seems you have to be a member in good standing of the Flat Earth Society to doubt the human effect on the Earth's climate.

The scientific consensus is that the release of greenhouse gases through the consumption of fossil fuels causes global warming. Like every industry, IT plays a part in this process. And as a growing industry, IT will be consuming more and more, and therefore contributing more and more to global warming and other types of environmental degradation. Just consider PCs. Gartner estimates that in the next three years, 400 million will be replaced worldwide. That's a lot of plastic, glass, metals and chemicals to dispose of, with all of their attendant environmental effects.

It can be argued that IT helps other industries reduce their resource consumption by making, say, petrochemical processes more efficient. And IT makes it possible for people to work remotely, cutting down on resource consumption by individuals. Although I can't prove it, I believe that without IT, the effects of climate change would be worse today, and much worse in the near future.

But let's not delude ourselves. Computers and networks come with environmental costs. IT devices can be resource-intensive to produce and difficult to dispose of properly.

It's time to add environmental factors to the total cost of ownership calculation for every IT hardware purchase. Right now, when IT buys gear from vendors, neither party gives much thought to the environmental aftereffects. Can you imagine being compelled to upgrade to a new car every five years and then having to either give the old one away or pay someone to take it because its net value was effectively zero and it required special handling to recycle? That's the situation CIOs are in with hardware.

But imagine if IT executives started to include environmental issues in TCO. They not only would ask how energy efficient a vendor's devices are but would also demand specifics on the disposal of the gear at the end of its useful life. They might even probe as to whether the widgets under scrutiny were produced in an environmentally sound manner. The answer might not be a deal breaker (and let's face it, many an IT vendor's sales force would be clueless about how the gear they peddle is put together), but just asking such questions would send a message to high-tech manufacturers: All other things being equal, I will choose the more environmentally conscious company.

By and large, CIOs do a pretty good job of minimizing the environmental effects of their IT assets. Today's tight budgets actually help here, since you buy technology only when you need it. But beyond that, many of you pay for the proper disposal of old computers. Some of you donate hardware to nonprofits and schools. Others offer obsolete gear to employees. A large number of you hire asset-disposal firms to recycle your stuff. To me, that sounds like the "reduce, reuse, recycle" credo in action.

One more action — making hardware's environmental effects part of your TCO calculation — seems like a logical and necessary step. It's time to take it.

Don Tennant will return next week.

THORNTON A. MAY

Of Age And Our Expectations

ON THE cable TV program *What Not to Wear*, fashion gurus Stacy London and Clinton Kelly admonish pre-Cinderellas and soon-to-be-princes to make age-appropriate sartorial choices. The most common transformations on the show involve persuading Generation Yers to become more mature and professional in appearance and boomers to abandon the clothes of their bygone youth.

Thoughts about what is appropriate for a particular age permeate many facets of life, from the way we teach children in classrooms to the technologies we use. While the fashion industry understands this important concept, the IT industry is only now coming to grips with it.

THORNTON A. MAY is a longtime industry observer, management consultant and commentator. Contact him at **thorntonamay@aol.com.**

Since hairless, bipedal apes first started measuring things, age — the chronological measurement of how old we are — has been the überbenchmark for mankind. Every year of our lives carries expectations regarding what we are supposed to accomplish, milestones we are expected to reach, information we are supposed to know and skills we ought to master.

Milestones have even been legislated, with lawmakers establishing a draft age (an age when it is appropriate to go to war), a voting age, a drinking age and a driving age. Insurers look at the driving records of those who have reached and surpassed the driving age and fix their rates accordingly, with the youngest drivers paying the largest premiums.

Also weighing in on what is age-appropriate, the American Academy of Pediatrics once told us that children under 2 should not watch TV at all and that older children should watch no more than two hours a day.

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Distinguished Research Scientist, eBay

"... the interaction with ... attendees was well worth it ... "

Charlie Pelton
VP/CIO, Market Street Mortgage

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Conference At-a-Glance *(subject to change)*

For details and updates, visit **www.snwusa.com**

MONDAY, APRIL 16

Registration Open 8:00am - 8:00pm

9:30am – 11:30am	Concurrent Sessions (Primer, Career Development, SNIA Tutorials, etc.)
11:30am – 1:00pm	Luncheon
12:00pm – 5:00pm	Pre-Conference Golf Outing
1:00pm – 5:25pm	IDC Analyst Briefing
1:00pm – 5:25pm	Concurrent Sessions (SNIA Tutorials, End-User Case Studies, etc.)
4:40pm – 6:15pm	End User Town Hall Meeting
5:00pm – 7:00pm	Speed Dating with IDC: A Channel Partner Networking Event at SNW
7:00pm – 9:00pm	Welcome Reception

TUESDAY, APRIL 17

Registration Open 7:00am - 8:00pm

7:15am – 8:15am	Breakfast
8:15am – 12:30pm	General Conference Sessions
12:45pm – 2:00pm	Luncheon
2:10pm – 5:40pm	Concurrent Sessions (SNIA Tutorials, End-User Case Studies, etc.)
5:40pm – 8:40pm	Expo with Dinner and Solutions Center

WEDNESDAY, APRIL 18

Registration Open 7:30am - 7:30pm

7:30am – 8:15am	Breakfast
8:15am – 12:15pm	General Conference Sessions
12:15pm – 2:00pm	Expo with Luncheon
12:15pm – 7:15pm	Solutions Center Open
2:10pm – 5:40pm	Concurrept Sessions (SNIA Tutorials, End-User Case Studies, etc.)
4:00pm – 7:00pm	Expo and Solutions Center Open
7:00pm – 9:30pm	Gala Evening with Dinner and Entertainment
9:30pm – 11:00pm	Post-Gala Reception

THURSDAY, APRIL19

Registration Open 7:30am - 10:00am

7:30am – 8:30am	Breakfast
8:30am – 12:00pm	Concurrent Sessions (SNIA Tutorials, End-User Case Studies, etc.)
12:00pm	Conference Concludes

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Clyde D. Smith
SVP Broadcast Engineering, Turner Broadcasting System

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Complimentary for Registered IT End-Users

Monday, April 16, Noon - 5:00pm

The Steele Canyon Golf Club
Jamul, California

The Pre-Conference Golf Outing at The Steele Canyon Golf Club, is complimentary for registered IT End-Users (other participants, including sponsors and vendors, may play on an "as available" basis and are responsible for all applicable golf outing expenses).

For information or to apply for registration, visit www.snwusa.com or call 1-800-883-9090

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If not indicated on your business card, please provide the following required information:

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Please check ONE of the following:

	Earlybird Registration (on or before 3/1/07)	Full/Onsite Registration (after 3/1/07)
❑ **I am an IT End-User*** (Complete Attendee Profile below)	❑ **$1,290** General Conference Package (all pricing includes General Conference, plus Technical and Business Tracks, SNIA-produced Tutorials, SNIA-Certification "Test-Ready" Courses and Hands-On Lab)	❑ **$1,690** General Conference Package

* IT End-Users are defined as those who are attending Storage Networking World with an intent (and an IT spending budget) to potentially buy/lease hardware/software/services, etc. from our conference sponsors and are not themselves an IT vendor. As such, account representatives, business development personnel, analysts, consultants and anyone else attending who does not have IT purchasing influence within their organization are excluded from the "IT End-User" designation. Interpretation and enforcement of this policy are at the sole discretion of Computerworld.

Attendee Profile: This section MUST be completed by IT End-Users and Channel Partners/Integrators/Consultants only (optional for all other registrations) in order to process your application.

Your Business/Industry:
- ❑ Non-Tech: Advertising/Marketing/PR/Media
- ❑ Non-Tech: Agriculture/Forestry/Fisheries
- ❑ Non-Tech: Education
- ❑ Non-Tech: Finance/Banking/Accounting
- ❑ Non-Tech: Government - Federal (including Military)
- ❑ Non-Tech: Health/ Medical/Dental Services/Pharmaceutical/Bio-Tech
- ❑ Non-Tech: Insurance/Real Estate/Legal Services
- ❑ Non-Tech: Manufacturing & Process Industries
- ❑ Non-Tech: Mining/Oil/Gas
- ❑ Non-Tech: Retailer/Wholesaler/Distributor
- ❑ Non-Tech: Transportation/Utilities (Energy, Water, etc.)
- ❑ Non-Tech: Travel/Hospitality/Recreation/Entertainment
- ❑ Non-Tech: Other _____
- ❑ Non-Tech: Communication Carriers (ISP, Telecom, Data Comm, TV/Cable)
- ❑ Tech: Manufacturing of Computers, Communications, Peripheral Equipment or Software
- ❑ Tech: Service Provider (ASP, ESP, Web Hosting), MSP, BSP
- ❑ Tech: Other _____

Your Job Title/Function:
- ❑ IT Management: CIO, CTO, CSO
- ❑ IT Management: Director
- ❑ IT Management: Manager/Other IT Manager
- ❑ IT Management: Technical Consultant
- ❑ IT Management: VP
- ❑ Business Management: CEO, COO, Chairman, President
- ❑ Business Management: Other Corporate, Business Manager
- ❑ Other: Non-Manager _____

What is the one item that best describes your involvement in the IT purchase process?
- ❑ Authorize/approve purchase
- ❑ Evaluate/recommend products, brands, vendors
- ❑ Specify features/technical requirements
- ❑ Set budget for expenditures
- ❑ Determine need to purchase
- ❑ Create IT strategy
- ❑ None of the above

Number of employees in your entire organization (ALL locations):
- ❑ 20,000 or more
- ❑ 10,000 - 19,999
- ❑ 5,000 - 9,999
- ❑ 1,000 - 4,999
- ❑ 500 - 999
- ❑ 100 - 499
- ❑ 50 - 99
- ❑ Less than 50

What is your organization's annual IT/IS budget for all IT/IS products?
- ❑ $1 Billion or more
- ❑ $500 Million - $999.9 Million
- ❑ $100 Million - $499.9 Million
- ❑ $50 Million - $99.9 Million
- ❑ $10 Million - $49.9 Million
- ❑ $1 Million - $9.9 Million
- ❑ $500,000 to $999,999
- ❑ $250,000 to $499,999
- ❑ $100,000 to $249,999
- ❑ Less than $100,000
- ❑ None of the above

What is the estimated annual revenue of your entire organization?
- ❑ $10 Billion +
- ❑ $1 Billion - $9.9 Billion
- ❑ $500 Million - $999 Million
- ❑ $100 Million - $499 Million
- ❑ Less than $100 Million

What is your organization's MOST mission critical development/implementation project this year?
- ❑ Business Intelligence/ BPM/Customer Analytics
- ❑ Data Management
- ❑ Mobile & Wireless
- ❑ Enterprise Infrastructure/Data Center Buildout/Consolidation
- ❑ Network Infrastructure/Storage
- ❑ Security
- ❑ Application Development and Integration (Web services/EAI)
- ❑ Compliance

What is your organization's SECOND-MOST mission critical development/implementation project this year?
- ❑ Business Intelligence/ BPM/Customer Analytics
- ❑ Data Management
- ❑ Mobile & Wireless
- ❑ Enterprise Infrastructure/Data Center Buildout/Consolidation
- ❑ Network Infrastructure/Storage
- ❑ Security
- ❑ Application Development and Integration (Web services/EAI)
- ❑ Compliance

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- ❑ Yes
- ❑ No

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Date

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By participating in SNW's Channel Partner/Integrator registration package, registrants may enjoy the following benefits: One company representative may receive a full conference pass to SNW Spring 2007; additional company representatives pay the prevailing rate for full conference passes; company may invite up to five IT User customers to attend SNW Spring (IT Users must be strictly compliant with IT User definition on the supplied registration form). Registrants must abide by SNW's non-solicitation policy: www.snwusa.com

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2) He or she may transfer this registration to the Storage Networking World Fall 2007 conference.
3) The registration fee will be refunded, less a $250 service charge (if written notice is received by 4/1/07); no refunds will be given after 4/1/07.

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But who monitors society's expectations regarding technology ownership and use? A game of Chutes and Ladders might be labeled as appropriate for ages 4 to 7, but vendors don't do that for cell phones, instant messaging clients or search engines.

It stands to reason that in a world infused with ever more technology, our choices and our facility with technologies would begin to play a bigger role in defining age-appropriate behaviors.

Anthropologists have observed that the age at which parents give cell phones to their children illuminates interesting boundary and life-stage issues. One sociologist believes that for kids, receipt of a cell phone is "a matter of coming of age."

As interesting as all this might be, what practical applications does it carry? Here's an interesting exercise that the IT Leadership Academy has conducted with MBA students, social scientists, medical researchers and political scientists: Have your team choose ages of interest — say, 5, 16, 21 and 40. Then ask them to write down the age-related expectations they have for each, including their age-related technology expectations (tools, preferences and behaviors). You will be surprised at what you learn about attitudes toward age groups. And that's something that's important to know.

In the workplace, there is a widely held misconception that technology is a young person's game. We are told by pundits that digital natives — those who grew up after computers, cell phones and the Internet had become widely available — are destined to be the new masters of the universe. But is this conventional wisdom the real truth of the matter? I don't think so.

In reality, we live in an age in which old forms and traditions are breaking down. Thanks to technology, old people don't act like old people anymore. Biases based on chronological age are disappearing.

Figuring out personal age-appropriate technology behavior is confusing today and will become more complicated in a future workplace that smashes together at least five distinct generations of employees — from the Silent Generation, born in the Depression years before World War II, through the postwar baby boomers, their Generation X and millennial (or Generation Y) successors to Generation We, now mostly in elementary school.

One thing that's certain about this workplace of the near future: You will no longer be able to go by the general rule that the oldest guy in the joint is the person in charge — or the least knowledgeable about technology.

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READERS' LETTERS

It's Misleading to Say We're Overdue for Flu

AVIAN FLU was discovered nearly 10 years ago; the Chicken Little squawking about the danger of an "overdue" pandemic has more to do with agendas using fear for profit and less to do with fact ["Heads in the Sand," Technology, Jan. 8]. Pandemics do not occur on a periodic schedule, so it's deceiving to proclaim that we are "overdue" for one. As for the deaths in the 1918 pandemic, remember that the cause of flu was not yet understood at that time. Since then, there have been several pandemics, all of lessening severity, and many scares. More people die each hour from tuberculosis than die each year from avian flu. Spreading fear about a nonexistent threat dilutes efforts to combat harmful diseases that are a real threat to mankind.

Terry Clark
IT director, Columbus, Ind.

Not Buying Apple For the Enterprise

WE HAVE about 600 mixed-platform computers on campus (running both Windows XP and Mac OS X). I agree that Vista will pose headaches, but Mark Hall's implication that Leopard will gain traction in a managed enterprise environment is absurd ["Why Vista Is IT's Big Headache," Forecast 2007, Jan. 1]. Mac OS X and Leopard have major flaws in their integration with Active Directory and Kerberos and how they handle NTFS shared files. Apple makes cute computers, but until it gets its enterprise management and deployment tools up to speed, they will continue to be toys.

David Alfonso
Director of technology, Trinity School, New York, david.alfonso@trinityschoolnyc.org

Going Deep on Vista Group Policy

JUST A few corrections on your treatment of network location awareness (NLA) as it relates to Group Policy (GP) in Vista (and Longhorn Server) ["Longhorn Server Revealed: Group Policy Enhancements," *Computerworld.com*, Jan. 12]. First off, in pre-Vista, the issue is that slow link detection uses Internet Control Message Protocol (ICMP) to determine if a domain controller is available. This is actually a very fast process, but not very accurate, and if ICMP is blocked for any reason between client and domain controller, then *all* GP processing fails.

NLA improves on this by doing away with ICMP and using a more sophisticated algorithm for determining link speed between client and domain controller. In addition, NLA adds new refresh behavior to GP. Specifically, if a user or computer is not in contact with a domain controller during a normal GP refresh cycle, then the next time that NLA detects a domain controller, it will trigger a background GP refresh then and there. Note that the behavior described in the article for pre-Vista connecting via VPN and requiring a reboot to refresh policy is not correct (and wouldn't really work, since during the reboot, the VPN would not be connected). What happens pre-Vista is that after the VPN is connected, background refresh of GP happens on the normal 90-minute schedule. The only thing NLA adds to that picture is that if, and only if, there has been a previous GP refresh failure and a domain controller then becomes available, then NLA will automatically trigger the background refresh rather than waiting for the background interval.

Darren Mar-Elia
CTO and founder, SDM Software Inc., San Anselmo, Calif.

Editor's note: *The online article discussed in this letter was revised on Jan. 16, in part to reflect some of Mar-Elia's comments.*

iPhone, Therefore . . .

FROM A European or Asian point of view, the networking specifications for the iPhone are a surprise: quad-band GSM/EDGE and Wi-Fi 802.11g ["20 Things We Don't Know About the iPhone," *Computerworld.com*, Jan. 11]. But there is no 3G support to any of the various standards, or later 802.11 standards (covering speed and security) or WiMax. All of this will slow adoption outside the U.S. You certainly can't use the phone in Japan or Korea, and most European countries are well along with their 3G migrations (which gives a useful speed boost).

Also, in order to be a success, the phone has to be available off contract, because even with number portability, people are reluctant to change networks.

Miles Thomas
Harpenden, England

JACK GOLD missed a big point in his article "Will Anyone Answer When Apple iPhones Home?" [*Computerworld.com*, Jan. 10]. Many people hate cell phones. They are counterintuitive blunderbusses. Only technogeeks who use them constantly can figure out how to use them. I don't have to use my cell phone constantly, so every time I want to do something like get on the Internet, it takes me forever to figure it out. I for one can't wait for the iPhone to come out so I can have a device I can actually use. The iPhone has a beautiful, intuitive interface. Once, I tried to find an address for a business on the Internet on my phone. My driver found the place by driving around before I could get it to come up on my cell phone.

Barbara Groom
Owner, Lost Coast Brewery, Eureka, Calif.

IF STEVE JOBS is worried ["Cisco Sues Apple Over iPhone Trademark," *Computerworld.com*, Jan. 10], he should just change the spelling and call it the iFone. We'll understand!

Bob Hand
Tallahassee, Fla.

AT&T SHOULD take a note from Steve Jobs and call its wireless service Verizon ["AT&T to Replace Cingular Brand Monday," *Computerworld.com*, Jan. 12].

M.J. Seebeck
Project manager, Albuquerque

Samba Time

I ENJOYED the article "Hands On: Setting Up a Storage Network in Your Home" [*Computerworld.com*, Jan. 7], and I think many people will find it useful. One minor correction, though: All of the systems reviewed by Robert L. Mitchell can be used with Linux clients if the Linux client runs Samba. I have used a RAID-5 Buffalo Technology TeraStation as my home NAS device for a year, and it works fine with all of my Linux, Mac OS X and Windows systems.

Bill von Hagen
Verona, Pa.

COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

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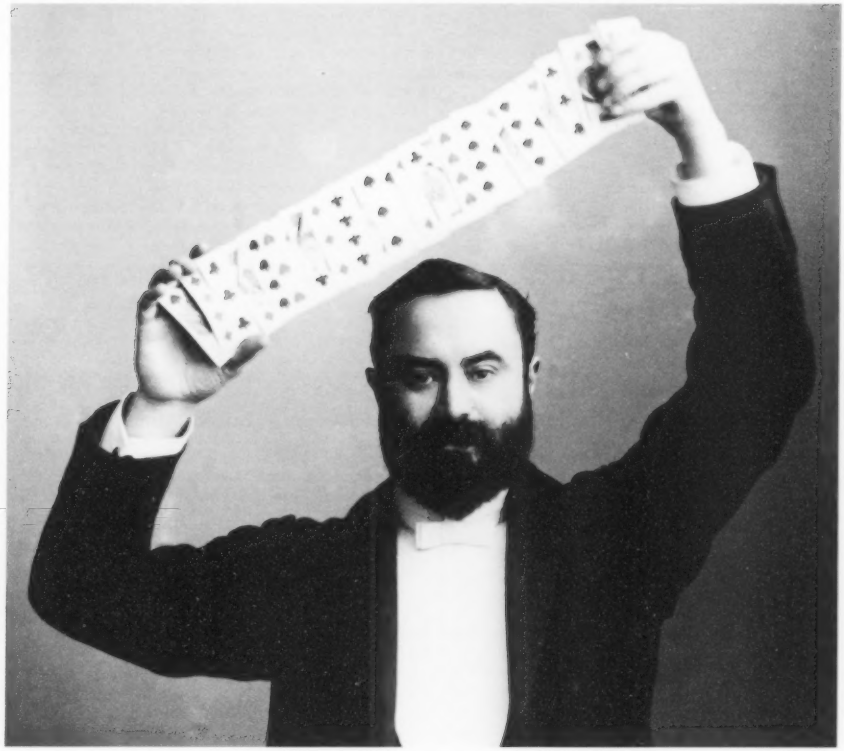

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EDITOR'S NOTE

SPECIAL REPORT

Reinventing IT

From supporting player to strategic partner

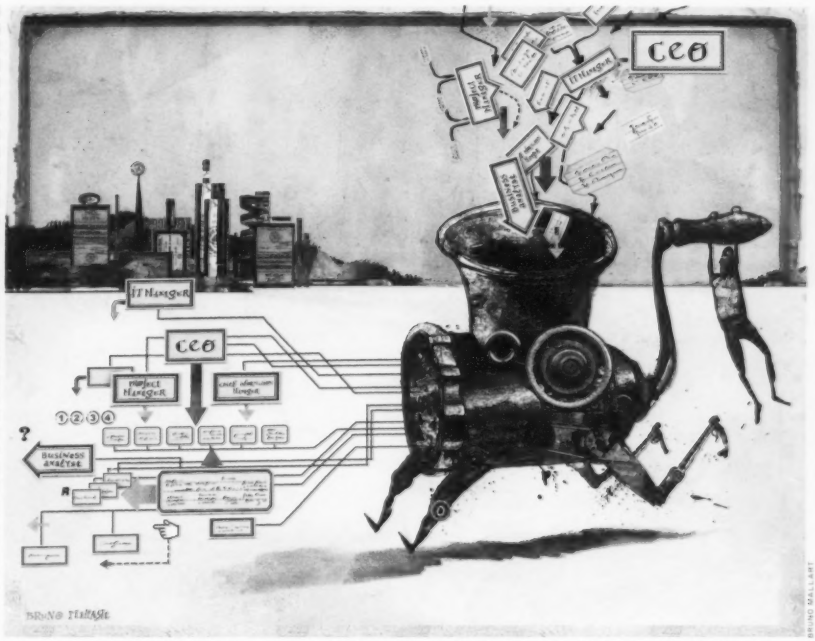
IT'S A CHANGE that's making more of a soft clatter than a loud crash. Compelled to achieve closer alignment with company needs and business demands, IT has once again entered a time of transformation. Where once IT solely helped support the business, now it must help define the business.

Although tangible change isn't ubiquitous yet, reinvention is happening in force at some of the most influential IT departments in the country (see page 24). Take Trans World, which runs some 800 music stores worldwide. IT analysts there have been elevated to the project management office, where they now oversee all technology and business projects and all business process changes. At consumer goods giant Procter & Gamble, the IT department was first restructured and then merged with human resources, finance, strategic planning and relocation operations in a companywide shared-services organization. IT workers now focus exclusively on high-level, IT-enabled business projects, while routine IT work is sent outside.

The dynamics of IT finance are changing, too (see page 26). At brokerage firm Insurance House, IT now facilitates the budget dialogue and helps set spending priorities. At Rent-A-Center, new IT initiatives are now designated as capital expenditures, thus giving key IT projects a higher profile.

The well-trodden IT career ladder is being dismantled and rebuilt as well (see page 30). If you think the path to the top is a straight line, think again. CIOs and IT career experts stress that titles no longer matter much, and following a career path that zigzags from business to IT and back again is a good way for tech staffers to develop business chops.

In the following pages, you'll find more examples of IT reinvented. Have we given you something to think about? In this time of reinvention, fresh thinking is exactly the point.

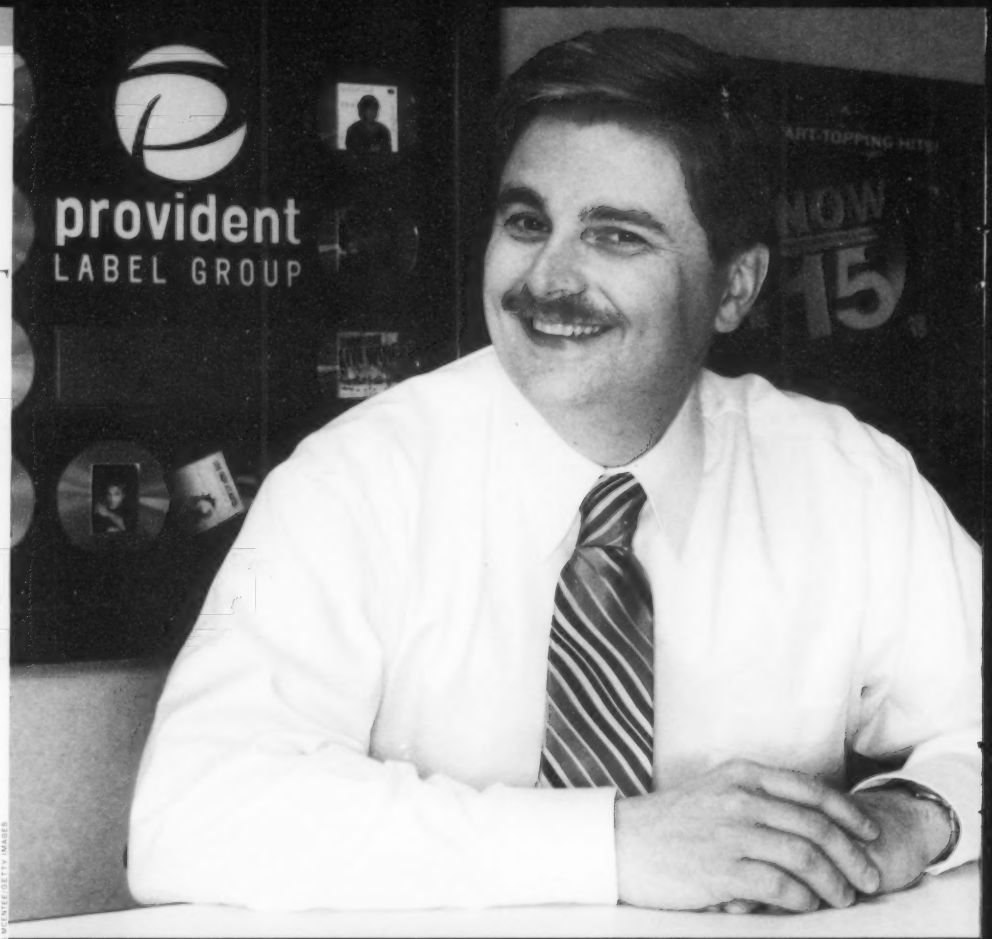


Ellen Fanning is special projects editor for Computerworld. *She can be contacted at ellen_fanning@computerworld.com.*

Reimagining THE IT Department

Just supporting the business? Not anymore. IT leaders are helping to reinvent it.

By Julia King



JOHN MCDERMOTT/GETTY IMAGES

"If you want to drive a significant amount of behavioral change in an organization, it takes some big swings," says JOHN HINKLE, CIO at Trans World Entertainment.

CIO STEVE OLIVE isn't handing out any gold stars to IT for providing good PC support or networking service at Raytheon Integrated Defense Systems. Consistently reliable and excellent IT service should be a given, he says.

What businesses need and IT should be providing are innovative solutions to business challenges. That means creatively applying technology to produce goods more efficiently and at a lower cost, to sell and service more of them, and to do so at the highest possible profit margins.

It also means using IT to create new products and services and even whole new business models, says Darryl Lemecha, CIO at Alpharetta, Ga.-based ChoicePoint Inc. Because technology is embedded in just about everything a company does, "technology strategy and business strategy are now one," he says.

Kathleen McNulty, CIO at The Schwan Food Co. in Marshall, Minn., puts it this way: "It's not about IT automating the business anymore. It's about innovating it, improving it."

So, forget about IT supporting the business. IT leaders are focused on reinventing the business, starting with the IT organization.

Their timing couldn't be better, according to Gartner Inc., which predicts that within five years, 60% of chief executives will make their CIOs responsible for using information as a strategic (read: revenue-generating) asset. Gartner also predicts that 40% of CEOs will make CIOs responsible for business model innovation.

But IT executives such as John Hinkle at Trans World Entertainment Corp., Patrick Bennett at E! Entertainment Television Inc. and Filippo Passerini at The Procter & Gamble Co. are all over this trend already. They are completely transforming their IT organizations, and everything is up for radical change, from how and where IT is housed within their companies to IT job titles. IT duties increasingly involve responsibility for business processes as well as the technology that supports them. Also up for reinvention is how IT value is measured.

"If you want to drive a significant amount of behavioral change in an organization, it takes some big swings," says Hinkle. "Maybe that means dramatic structural change or changing what people do." At Albany, N.Y.-based Trans World, it involved all of the above.

One of the first things Hinkle did when he came to Trans World from General Electric Co. was abolish the title of analyst and move people in that role into the project management office (PMO), which oversees all technology and business projects as well as all business process changes for the company's 800 music stores. Project managers have developed expertise and a special rapport with the specific business functions to which they are dedicated. New projects and even systems changes go through the PMO, which uses Six Sigma project management processes.

As CIO, Hinkle oversees the PMO, is

a member of the company's executive board and is deeply entrenched in all business decisions.

"I'm involved in merchandising, store planning and in every other core strategic meeting at the company," Hinkle says. "I'm expected to be very well versed in these things, and I'm also expected to answer more than the IT questions. I'm part of the strategy brainstorming."

Hinkle expects his IT team to be equally well versed in business processes, which is why every IT staffer spends a minimum of three days in the field every year, working in a store, a warehouse or a department such as finance or payroll. "That way, they know what the business really needs and how to help," he says. "You don't have a supply chain system or financial system that works in a box or a point-of-sale system that just takes money. Now we have highly integrated data flows, so every project requires an understanding of all systems and all business areas." By knowing the business, "they better understand why they might get a call [for support] at 1:00 in the morning," he adds.

Local-Level CIOs

At ChoicePoint, Lemecha created a federated structure with two bands of IT positions: one for technical workers, who hold the title of IT architect, and one for managers, who hold the title of business information officer. "We believe in two independent career paths. Just because you don't manage people doesn't mean you should be limited in how far you go in the company," he says.

The BIOs are embedded in each of ChoicePoint's businesses and act as local CIOs. "They understand the operational issues, they know all of the people, and they spend 100% of their time in the business units," where they can directly affect business-IT alignment, Lemecha says.

"They know and understand the business because they live in the business," he says. The chief benefit of this arrangement is "when you fix the alignment problems, you do the right IT projects and, ultimately, impact revenue and get better customer service," Lemecha says. ChoicePoint's consistent revenue growth, ranging between 5% and 15% annually for the past several years, is no coincidence, he says.

At Cincinnati-based P&G, the company's top IT project over the past three years has been to reinvent IT itself according to a four-year strategic alignment plan. "In the last year, we reshaped, renamed, refocused and began retraining our 2,500-person IT team," says Passerini, who is global business services officer in addition to CIO.

The IT department was renamed from simply IT to Information & Decision Solutions (see story below). The new IDS group was then merged into P&G's Global Business Services shared-services organization, which is also home to the human resources, finance, strategic planning and relocation functions. IDS staffers focus on high-level, IT-enabled business projects exclusively; routine IT tasks are outsourced to Hewlett-Packard Co. under a 10-year, $3 billion agreement signed in 2003.

Passerini has charged IDS with the same three business goals of every other P&G business unit: to increase profits, market share and volume. To accomplish this, IDS focuses on three key tactics: getting and distributing data faster, innovating and speeding the ways in which P&G gets products to market, and applying "consumer-friendly" techniques to delivering new IT products and services to P&G's internal user base.

For example, IDS has developed a virtual modeling process and simulation techniques that allow package design, consumer testing, product testing and even new manufacturing techniques to be developed and tested in a fully virtual environment, dramatically accelerating the cycle time for new products.

"When we have new products, we can build virtual retail shelves and even show our competitors' products on them. More importantly, we can build our products to the scale of different retailers' shelves. This is all about building business capabilities for P&G," Passerini says.

"The whole idea is running IT as a business, but not necessarily using [traditional return-on-investment] financial measures to quantify IT's value," he says. "In the end, no one believes those numbers anyhow.

"The numbers you want are higher profits, market share and volumes. In reality, it's all about the relevancy of IT's contribution to the business," Passerini adds. That's how IT's value is measured at P&G.

E! Entertainment Television in Los Angeles has radically departed from its traditional model of separate IT and TV broadcast operations. The change coincides with the broadcast side's shift from tape to digital technology. Before, separate vice presidents oversaw online, television network and IT operations. Now, there is a single senior vice president of technology and operations, and ideas, designs, technology and projects are shared among all three operations.

For example, IT personnel were involved in the design of E! Online content from the time the site was first launched in October 2006, notes Bennett, executive director of business applications. "Before, we would have gotten the specs and built it much like a contractor," he says. "But now, IT was in on branding discussions and audience focus groups from the beginning.

"What we've done is flatten the more formal [software development] processes and made them more person-to-person" as a way to develop products and services faster across all media, Bennett says. "As we interact with executives and users and release software iteratively, we're also gaining greater domain knowledge about the business," he notes.

Just recently, IT participated in a discussion about offering an online feature that would let Web viewers of E! Online vote on whether celebrities on the red carpet at the Golden Globe and Oscar celebrations are hot or not.

"Now that's not a traditional discussion or conversation you would have in IT," Bennett notes wryly. "But now we're thinking about these kinds of things across all media."

Under the new organizational structure, "there's constant interaction and exchange of information and ideas through human contact. As opposed to being assigned to a user department, IT is constantly interacting across media," he says. "You're more of a partner with the business. You're creating products together. IT is definitely stepping out from behind the shadows of back-office corporate systems."

Bennett says IT's broadening role as a business peer is one of the main reasons he decided to earn an MBA at the University of California, Los Angeles' Anderson School of Management.

"At first, in marketing meetings, we'd spend hours talking about color palettes and branding — and I didn't know a company brand from a cattle brand," he says. "It has been a real eye-opener."

"It's very much a different mind-set," says Raytheon's Olive, whose overhauled IT organization now includes customer relationship managers who are embedded in the business, plus 10 teams of technical workers who support IT frameworks such as infrastructure, application support and desktop services. The vast majority of those technical workers are "homeroomed" in cross-business teams that work on projects that the customer relationship managers bring to them, he notes.

"It took two years for this model to really jell. At first, there was a little bit of tension while the clarity of roles and responsibilities was a little confusing," Olive acknowledges. "But once we defined roles and responsibilities, it improved morale and worked to create a highly motivated workforce because we were making higher-level contributions to the business."

Getting the Message Out

Reinventing the IT department is all well and good, but unless IT staffers and other business units fully understand the new structure and its expanded role, the benefits will be slow to materialize.

The revamped IT group at Procter & Gamble, for example, "is all about identifying what is of business value and determining how technology can help provide that value. It's not about merely keeping systems and networks up and running," says Filippo Passerini, global business services officer and CIO at the consumer packaged goods giant. And its name should reflect what the organization does. So, what was once called IT is now called Information & Decision Solutions. The name not only more accurately describes what the organization provides, but also helps IT employees better understand that their mission is now to deliver strategies and technology-enabled solutions to the company.

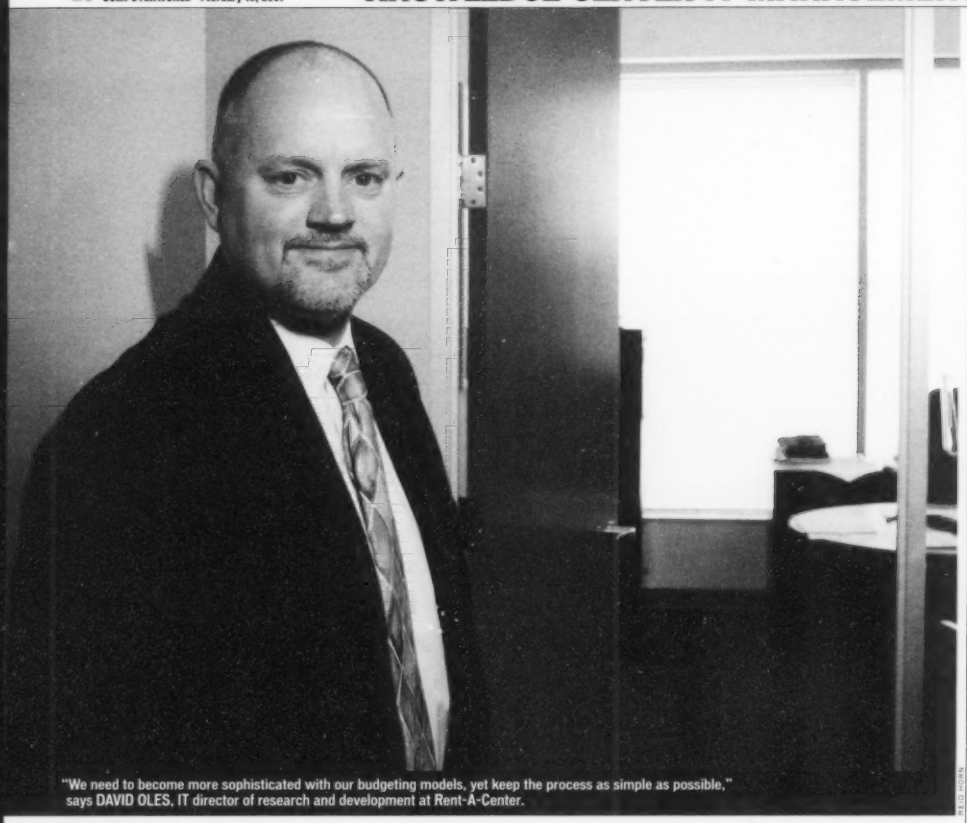
Similarly, at Tewksbury, Mass.-based Raytheon Integrated Defense Systems, the department that was known as Information Systems is now called Information Solutions, which more accurately describes what the group offers the rest of the company, says CIO Steve Olive.

At MIT, CIO Jerry Grochow regularly communicates what the IT organization is working on and publishes updates on its accomplishments in various campus news outlets. IT also produces a bimonthly newsletter in print and online and holds lunchtime seminars and other forums to share new technology projects with other departments.

"When I came to MIT, there weren't any dedicated resources focused on communication for the IT department," Grochow notes. Now, a dedicated IT communications staffer reports to him.

"Communication is as important to our success and the success of our institution as the technology that we produce and support," Grochow says.

– JULIA KING



"We need to become more sophisticated with our budgeting models, yet keep the process as simple as possible," says DAVID OLES, IT director of research and development at Rent-A-Center.

Rethinking IT Budgets

IT finance is moving from a take-what-you-can-get approach to a proactive debate about spending priorities. **By Jennifer McAdams**

ON PAR with a trip to the dentist's office, IT budgeting tends to rank fairly low on any CIO's list of favorite activities. While alternative approaches to forecasting corporate IT expenditures won't necessarily make the process any less tedious or painful, progressive new budgeting practices could make life easier in the long run.

Though dreaded all year, the annual budgeting process rarely changes for most top IT executives. Corporate officials usually prescribe an amount — 5% of total operating expenses, for instance — and expect IT departments to keep spending within that figure. Alternately, the bean counters simply pull IT costs from the previous year and slap on a slight increase to account for inflation.

Seemingly straightforward, the traditional IT budgeting process still manages to put many CIOs and IT controllers on the defensive. Corporate accountants and business unit leaders demand to know what departments are getting in exchange for their technology surcharges, which are often levied as a chargeback or a fee extracted from various operational divisions to fund the IT department.

To inject the new levels of transparency that senior managers now demand, and further assert the business value of IT, more CIOs are becoming proactive.

"Now we are facilitating the dialogue and helping to establish the priorities. This subtle change makes a world of difference and allows my team to get an early heads-up so that we can plan resources accordingly," says Robert Golden, director of strategic business services at Insurance House, a Marietta, Ga.-based brokerage company that works with independent retail insurance agents throughout the Southeast.

Table Talk

Now afforded a more active role at the budgeting table, many CIOs feel immediate pressure to come up with better ways to plan and account for expenditures. "We need to become more sophisticated with our budgeting models, yet keep the process as simple as possible," says David Oles, IT director of research and development at Rent-A-Center Inc., a Plano, Texas-based chain of rent-to-own retail stores.

One simple move that Rent-A-Center has made involves the designation of new IT initiatives as capital expenditures. The idea is to isolate and highlight funding for new projects, rather than lumping these investments in with operational expenditures.

Rent-A-Center isn't alone. Many corporations are beginning to peel apart these two distinct budgeting subsets.

"There has been a real bifurcation under way," explains John Baschab, co-author of *The Executive's Guide to Information Technology* (Wiley, 2007). "IT departments are breaking the cost of new projects out from 'lights-on costs,' a term I use for the funding required just to run the IT department with no new initiatives. There is now a real effort not to mix baseline costs with the funding needed for new projects."

Splitting apart the two main components of a technology budget is little more than a good first step, however. Prudent CIOs will also impose the use of pricing and other industry benchmarks to make sure they are getting the best deals possible.

"Benchmarks are becoming a big driver. It is crucial for enterprise IT officials to find out if what they are paying is out of whack with what the rest of the market is paying," says Chris Nuttall, managing consultant in PA Consulting Group's North American sourcing and service management practice.

For CIOs to craft meaningful budgets, they need timely vendor pricing data, argues Jon Winsett, partner and managing director at NPI Financial, an Atlanta-based firm that specializes in budget management practices.

"Leading-edge companies are now working with outside pricing experts to gather historical pricing data. This allows them to understand the pricing flexibility of IT vendors and better grasp the impact that current market

Continued on page 28

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Continued from page 26

conditions really have on their budgets," Winsett says. "CIOs are more able to accurately identify savings in IT spend, simply by understanding what vendors are really charging for their products and services."

Golden says his department is determined to use industry benchmarks to fight overspending in all areas. "My managers forecast spend based upon the past 12 months. This includes staff, training, voice and data lines, software maintenance, hardware support and the stand-alone capital expenditure budget. This forecast is done with a solid gauge on the pulse of the market," he says.

Not-So-Nasty Chargebacks

For IT department leaders who must routinely justify the costs they pass along to various business units through delicate chargeback arrangements, solid market research is a necessity.

By their very nature, chargeback scenarios can instigate ill feelings between IT and other corporate departments.

"You usually see chargeback scenarios in a troubled IT department and in environments where business units are having difficulty trying to get value out of IT," says Baschab. "Chargeback mechanisms tend to cause underinvestment in critical infrastructure components, as well as significant internal dysfunctional behavior."

Yet for many corporations, chargebacks are a fact of life and aren't all bad. "We use tracking by business unit and an allocation process to charge the business," says Golden. "Typically, this can be a pretty nasty process, and ours is not without conflict. However, because we now develop our budgets and business cases together with our business partners, most of the spend is known upfront, and that minimizes surprises. We also provide complete transparency to all business unit heads."

Sean Worthington also recalls mixed experiences with chargebacks from his days as head of the IT departments at Silicon Graphics Inc. and other large organizations.

"When I have employed chargebacks, the organization desired to have control over IT spending. However, the chargebacks allowed me to more precisely allocate the IT costs back to the customers of those IT services," says Worthington, who is now CIO in residence at Planview Inc., an IT portfolio management company in Austin.

In fact, chargebacks can be highly effective, especially in situations involving easily measured expenses.

"Chargeback is best for commodity service and cost recovery when consumption is fairly predictable and demands drivers are clearly understood and manageable," says Scott Holland, senior director and IT program manager at The Hackett Group, a strategic advisory firm in Atlanta. "This is often the case for maintenance projects — for example, when IT dedicates a certain level of full-time equivalents to another department's maintenance needs and recovers through a chargeback instead of a budget transfer. This helps IT keep management control over those FTEs, where they may have lost management control if a budget transfer was arranged."

In some cases, chargeback arrangements are morphing into IT usage allocations. Specifically, business units are charged for their consumption of resources, such as storage or network traffic volumes. "For instance, a particular business unit in a financial services company might be processing a million trades per day," says Howard Rubin, an analyst at Gartner Inc. "IT can figure out how much this takes in terms of storage, networking resources, etc. Consumption becomes visible, and charges are assessed based on system volume and unit cost."

Allocation of IT resources based on usage often holds practical appeal for business unit leaders. "When both IT and business units know the level of support they are dealing with and the costs involved, the mutual satisfaction level is increased," says Brian Schwartzentruber, principal consultant at GlassHouse Technologies Inc. in Framingham, Mass. "Unit costs are per gigabyte, per server, per port or anything else that affects the delivery of service."

By moving toward usage allocations, corporate IT departments might be able to use the budgeting process to begin functioning more as internal service providers to business unit customers. In his book, Baschab recommends this approach and suggests the use of inter-enterprise contracts to clarify expectations. "Actual hours for supporting the business unit are tracked in a time reporting system, and actual hours are billed. Service levels are defined, and the IT department is responsible for achieving service levels guaranteed," he writes.

As a rule, IT leaders should no longer view annual budgeting pow-wows as the corporate equivalent of a root canal. Instead, CIOs should turn these exercises into opportunities for change. "To the extent that the budgeting process remains a blunt instrument to force IT spending to a certain limit and keep it there, it will continue to draw criticism that IT is expensive, unresponsive and ineffective," says Holland.

Indeed, the CIO grown tired of regular budget bludgeoning should consider a more proactive stance and demand not only a seat, but a voice at the budgeting table.

McAdams is a freelance writer in Vienna, Va. Contact her at JMTechWriter@aol.com.

Budgeting Buzzwords

SUMMARY-LEVEL BUDGETING: The prescription of IT budgets using minimum criteria, such as funding levels from the previous year. "This method lacks the clarity necessary to truly understand what everything costs and how IT costs align with the value to the business," says Sean Worthington, CIO in residence at PlanView.

CHARGEBACKS: A budget method that charges business units for their use of internal IT resources. "This method is often considered when the business units would like more direct accountability from IT," says John Baschab, co-author of *The Executive's Guide to Information Technology*.

BENCHMARKING: The use of industry data and research – such as analyst reports and vendor pricing figures – to make sure annual budgeting figures are on track. "Using these techniques, companies can check the competitiveness of their IT cost structures by using the external benchmarks their competitors use, along with information from vendors to assess competitiveness," explains Gartner analyst Howard Rubin.

PORTFOLIO MANAGEMENT: A comprehensive view of all IT projects across an organization that includes budgeting and costing data. "This improves project/investment focus and tightens control over spend by forcing explicit statement of project benefits and better tracking of the delivery of benefits," says Scott Holland, senior director and IT program manager at The Hackett Group.

DRIVER-BASED PLANNING: Harnessing the knowledge base of a particular business unit to better project IT costs for that division. "This is the best way to make sure that the business unit and IT plans and strategies are aligned with each other, so that everyone is rowing together," suggests Robert Hull, chief financial officer at Adaptive Planning Inc., a budgeting forecasting application company in Mountain View, Calif.

Enter the IT CFO

FLOATING AROUND the corporate IT community now is the notion that in certain instances, the IT budgeting process could use a dedicated expert – an IT chief financial officer.

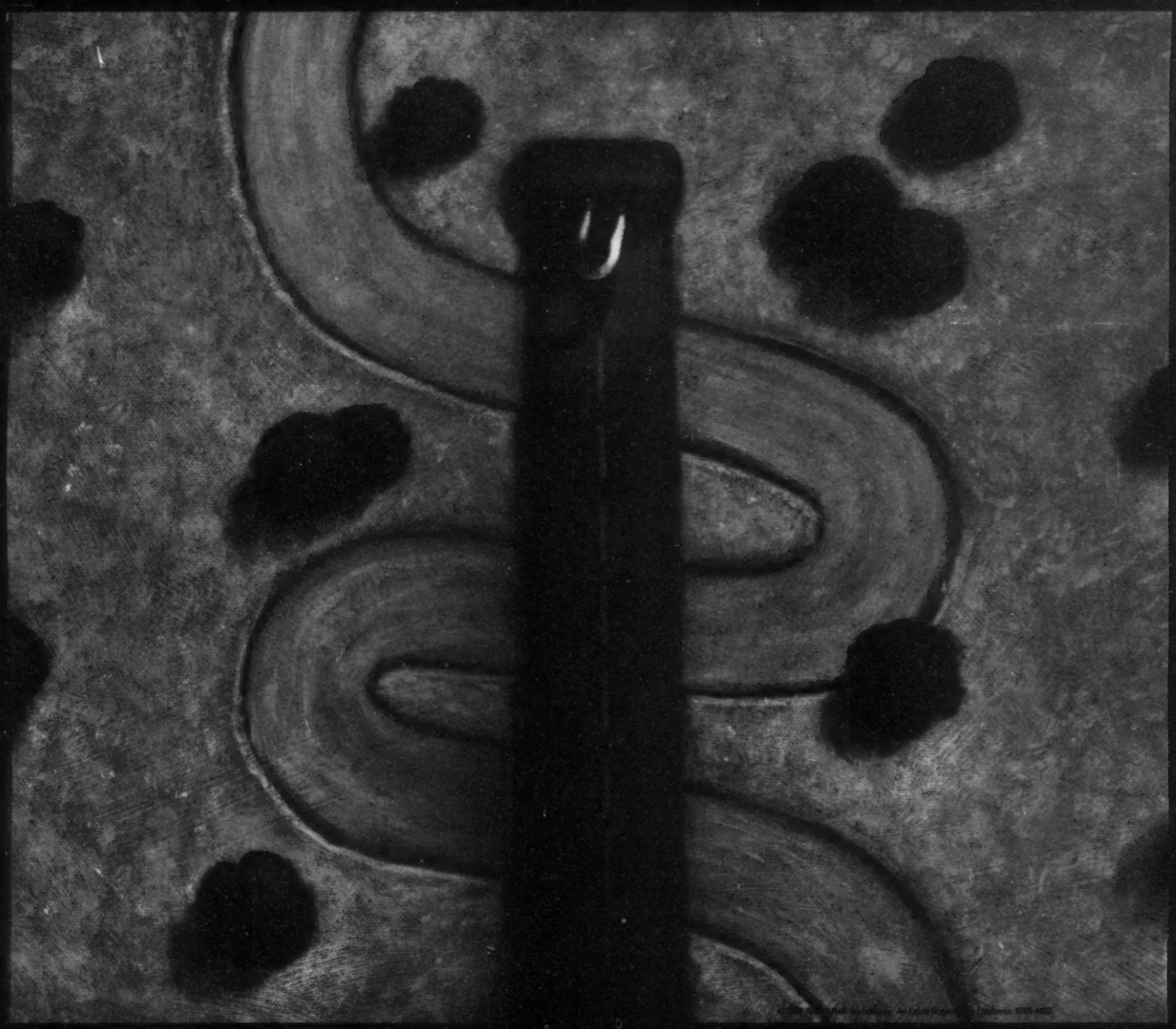
"Along with being a financial/business adviser, this position would include all the budgeting and actual reporting and oversight of project and service portfolios – along with costing figures – to ensure that the information being used was of sufficient quality," says Sean Worthington, CIO in residence at PlanView. "This person would also help keep the IT leadership team honest when it comes to the financial impact of our decisions."

Worthington says he sees some IT shops gravitating toward an IT CFO model. "I see this as an emerging trend, because of the interest I have seen from my peers and the increasing pressure toward greater financial transparency in IT spending from executive levels," he says.

Practically speaking, hiring an individual dedicated expressly to these functions doesn't yet make sense. "I'm not sure that a company of our size could justify an IT CFO," says Robert Golden, director of strategic business services at Insurance House. "However, we do employ many functions of that role to keep a tighter handle on spending, payment processes, payment methods, etc."

Other IT shops are not ready to make that bold leap. "IT CFOs scare the pants off me," says David Oles, IT director of research and development at Rent-A-Center. But, he adds, "I realize the importance of managing to a budget – not that CIOs aren't budget-conscious, because they are. However, a CFO responsible for the organization's IT accounting and financial structure may be even more mindful of the dollars spent."

– JENNIFER McADAMS



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MICHELLE ANDONIAN

Revitalizing Staff Skills

Forget the old IT career ladder. One way to advance is to zigzag between IT and business.

By Drew Robb

AS THE role IT plays in producing business value changes, so too does the notion of traditional IT skills or a typical IT career ladder.

"The world is becoming a giant service system, composed of 6 billion people, millions of businesses and millions of technology products connected into service networks," says Gina Poole, vice president of innovation and university relations at IBM. As a result, traditional technical expertise is no longer enough.

"In today's world, we need our technology people to be the business — to live and breathe it," according to Frank Laura, CIO at Quicken Loans Inc. in Livonia, Mich. "Because the business and the technology change almost daily, our team members must immerse themselves in the business and the technology."

That isn't to say that strong technical skills are no longer important. But they are increasingly viewed as a commodity that can often be obtained by hiring a consultant or by outsourcing nonessential services. What really matters, then, is knowing how to apply technology to improve business performance.

"You can go on the street and find a good Java programmer or those types of skills," says William Ulrich, president of Tactical Strategy Group Inc. in Soquel, Calif. "It is much more difficult to go outside the company and find someone who understands the in-depth nature of your business."

Computer Contortionists

According to IT executives, the new business-focused IT structure requires skills in multiple disciplines.

"We are becoming versatilists rather than technologists," says John Stiffler, director of IT governance and strategy at accounting firm Grant Thornton LLP in Chicago. Rather than just being skilled in a particular type of technology, he says, IT workers need to be "adept at understanding business issues and applying their technical experience and understanding to develop solutions."

This changes the traditional IT career ladder. "In IT, that ladder blew up years ago," says David Foote, president of Foote Partners LLC, an IT career research firm in New Canaan, Conn.

Now, there are two ways to get to the top of an IT department. "A lot of people in IT don't want to move into management but are still very valuable to the company," says Foote. "When

you have a very talented senior technical person who doesn't want to become a manager, you can move them into something like a distinguished engineer position."

The second path allows IT workers to switch between IT and business functions. "There are career tracks that zigzag back and forth between IT and business," he says. "Someone might start as a business analyst, then move into a project management job, then an IT management path, then go back to an innovation path . . . then to process management, then move up a rung to process leadership or process ownership, and then go back over to management as manager of an IT line of business." Similarly, systems architects can zigzag between designing processes and designing the infrastructure that supports them.

Role-playing

The bottom line is that titles are becoming less important. What counts is the particular technical and business skills someone can bring to bear.

"Companies are not looking at IT people as people with titles," says Foote. "They are looking at the role they play."

So, for example, while a company might have looked for an Oracle database administrator in the past, now it is looking for someone who can make its medical database HIPAA-compliant or can give customers access to inventory availability. As such, an IT worker's role can continually change, with or without any formal change in job title.

> In today's world, we need our technology people to be the business – to live and breathe it.
>
> FRANK LAURA, CIO, QUICKEN LOANS

"We frequently assemble 'virtual' or informal team structures that don't necessarily report to a single leader but work together on projects to support various business functions," says Laura.

And as IT workers move through these new teams, their individual roles alter. "For one particular need, you may be the senior team leader for a large group of people; for another time, you may be almost an independent consultant facilitating process-redesign sessions," says University of Pennsylvania CIO Robin Beck. This leads to a de-emphasis on formal titles and traditional career ladders.

"We don't have a traditional skills ladder or titles like 'Analyst III,' " she says. "We pay for responsibility, we pay for skills, we work hard to give excellent service, and when you do good work, you get more money."

This focus on business alignment does shift the types of careers available, however, whether or not they are given formal titles. "There are more career options now," says Ulrich. "You can move into an architectural position — data or technology — but you can also move into a role of a business analyst or business architect if you have built up enough business skills."

The New, Reskilled IT Worker

The shift away from strictly IT positions doesn't mean there's less need for technology-skilled staffers. In fact, that need is growing.

"As technology is becoming embedded in all aspects of business, society and our personal lives, the need for skilled IT professionals is greater than ever," says IBM's Poole. "There is an increasing requirement to apply technology, engineering and disciplined thinking to all aspects of the business."

But the very nature of IT work is evolving with the shift to a services economy. According to the Bureau of Labor Statistics, nearly 80% of the U.S. labor force will be in service industries by 2014. So, while there will still be a need for IT to provide computers for the hard subjects, such as computer-aided design and genome sequencing, more of the jobs will revolve around facilitating customer service. To this end, IBM's Academic Initiative has been working with universities to develop a degree program called services sciences, management and engineering (SSME). The program encompasses computer science, business strategy, social sciences and other fields.

SSME programs are now available at Carnegie Mellon, Penn State, North Carolina State, and the University of California, Berkeley, among others.

"IBM has been aware of these hybrid roles for a long time and has pioneered the idea of zigzagging," says Foote. "If you look at this model, it makes a lot of sense."

In addition to broad-based programs such as SSME, IT groups are also bringing in experts from other areas of the organization and giving them the technical training they need.

Beck reports that her latest hire came from a university business office. Stiffler says his CIO was an accountant for 25 years and therefore has an excellent grasp of his firm's business operations.

The noncore skills can also be obtained on a temporary basis. "In addition to looking at the traditional coders, we have to realize that we need graphic artists for Web design or economists to help us build models for forecasting," says John Rome, director of data administration and data warehousing at Arizona State University. "In the last year, we brought in various skill sets to help us in those areas."

But how does one go about gaining those skills? There is no single approach. Beck says that she spends a lot of money on retraining — some technical and some customer service. More than 80% of her staff had training last year.

Rome takes the budgetary approach. Since his staff is weak in project management, Rome says, he adds money to project budgets to include additional training in that area.

Others advise taking courses or seminars in finance, communications or business. And then there is the possibility of serving apprenticeships.

"Some businesses have rotated IT staffers to work in the field for six to nine months and then rotated them back into IT," says Tactical Strategy Group's Ulrich. "That gives them a much better feel for what is going on in the business."

Interdisciplinary workgroups also play a role in building skills. "You can have almost a recognized program of building experts through these collaborative teams who are exposed to so many things on the tech and business sides," Ulrich adds.

The bottom line is that training needs to be ongoing, with skill improvement being built into everything the IT department does.

"Retraining and reskilling are tremendously important for IT organizations, but it is a continuous thing you are doing," Beck says. "It is not a radical change, but taking components of what is the IT skill set and continually adapting them to what our clients need." ◗

Robb is a Computerworld *contributing writer.*

Five Old-School Skills For the New Age CIO

As the IT personnel structure becomes more fluid, duties and titles change. But the block-and-tackle skills for the top IT job haven't changed much at all. "There has to be somebody who is the master of the technological infrastructure," says William Ulrich, president of Tactical Strategy Group. And that somebody is the CIO. So, what skills make a successful CIO in this new world? Many of the same skills they've always needed, such as the following:

1. Smart money management. "One has to recognize that you are in business to make money primarily," says Carl Turza, CIO at Sigma-Aldrich Corp. in St. Louis. "Technology is the only thing that allows you to achieve three things simultaneously: increase revenue, increase margins and increase service level. If the CIO is busy applying technology to do those three things, the business will employ a competitive advantage."

2. Ability to connect with clients. "It is really important to have good listening skills, good communication skills and good relationship building with clients internally and externally," says University of Pennsylvania CIO Robin Beck.

3. Leadership and a vision for the future. "A successful CIO must possess and practice strong leadership," says Frank Laura, CIO at Quicken Loans. "Furthermore, they must also spread their leadership beliefs throughout the team." Says Ulrich, "The CIO or IT people may be the only ones who can see across the business stovepipes that have been established. The CIO could become the visionary who can allow [the senior business people] to move forward in a more coordinated fashion."

4. Inside-out knowledge of the business. A successful CIO is "someone who has developed a strong relationship with all the business constituents at a senior level and can help align the IT organization with the business strategies," says John Stiffler, director of IT governance and strategy at Grant Thornton. "He can put things in the context of the business. He doesn't wait for the business to tell him what to do; he tells the business how IT can help them."

5. Experience in the technology trenches. "Technical skill is a given," says Beck. "You can't talk about creating environments and change unless you have built and maintained technical excellence. That is the basic skill this all depends on."

– DREW ROBB

Snapshots

What Matters Most

Which skill do you find most valuable in your current IT staff?

1	Ability to work well with customers and end users
2	Ability to communicate well
3	Ability to manage a project well
4	Strategic thinking skills

Room for Improvement

Which skills do potential IT leaders most frequently lack?

1	Strategic planning
2	Communication
3	Knowledge of the business
4	Overall business acumen
5	Budgeting/finance

Articulate Leaders

What are the top skills or qualities you look for in an up-and-coming IT leader?

1	Communication skills
2	Knowledge of the business
3	Technical knowledge
4	A record of innovation
5	A career history in my industry

SOURCE: ONGOING EXCLUSIVE COMPUTERWORLD SURVEY OF 127 IT EXECUTIVES, FEBRUARY 2007

MARK HALL

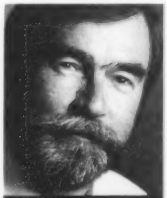
Business Is Business

IF YOU WANT to treat your IT department like a business, go ahead. It's your career. But you might be putting your company at a competitive disadvantage if you do.

I know it's all the rage now to push IT departments beyond merely being aligned to business objectives and morph them into virtually independent business units. In a special report on the subject, one of our sister publications, *CIO* magazine, concluded that the savvy IT executive will "make over a deficient IT department in the image of a business." *Business Management* magazine says, "There's no secret to running IT like a business. It simply means that the IT group must do whatever it takes to sell products and services on a competitive basis."

Advocates argue that running IT like a business will improve IT's services because CIOs will fear losing work to other business execs who think they can do it better.

Oh, come on. Let's be realistic. Can you imagine senior business-line managers running around gathering application requirements, getting bids from external IT consultants, managing the project, and ensuring that it fits corporate standards and meets business and regulatory compliance mandates? Of course not. That's what IT is meant to do.



MARK HALL is a *Computerworld* editor at large. Contact him at mark_hall@computerworld.com.

Needless to say, there are rare but clear circumstances when IT should be perceived as a business. Sometimes it *is* the business, as with online retailers and software-as-a-service vendors. How they do IT is as important as the service they offer. For a Web-based retailer, IT is the only path to customers. Without IT, the business wouldn't exist. And great online SaaS software backed by crappy IT is really just a crappy service. Who would want it? The best online retailers and SaaS vendors have a relentless business focus on IT because without it, they won't have customers.

However, most companies shouldn't run IT operations like a business because IT is *not* their business. But, if you were going to, which organization would you want IT to emulate? Enron? Probably not. WorldCom? Doubtful. How about Apple under Steve Jobs? Now there's an idea. But would that be the floundering Apple when Jobs was forced out in 1985, or the company he runs today? People who say IT should be run like a business are spouting platitudes of little or no practical value.

IT is a vital corporate service inside a business — some would argue it's the most vital. But for most companies, IT isn't a business itself. And you never should treat it as such. Once you do, you'll lose competitive advantage because others in your market will likely be thinking of how IT can help a business initiative succeed while you're wondering how such an initiative will help your quarterly P&L report to the CFO. You'll become more timid in launching aggressive projects, and timid people don't make great IT leaders.

As a business, you'll be trying to squeeze maximum value out of your IT investments, but competitors that aren't smitten with the "run everything like a business" ideology will be experimenting with new, advanced technologies that could give their sales and product teams advantages that your company will lack. Think about it: There was no business reason for IT to equip field sales and support staff with pricey BlackBerry devices or Palm handhelds when they hit the market. After all, if IT is a business, why invest in new technology and the IT expertise needed to support it if there's no bottom-line return for the CIO's balance sheet? Oh, sure, you could charge your field staffers an arm and a leg to support their handhelds, but that would probably kill such projects. In the meantime, your competitors will be outfitting their teams with mobile devices and improving their communications with the home office and their customers, with positive bottom-line results. Naturally, your department's bottom line will continue to look dandy, but your company will be losing market share to its opponents.

Delivering the best IT services for your business and its partners and customers is good for your company. But it's not a business. Sure, you can create chargeback schemes on a per-project or per-use basis. These are helpful to give business unit managers a sense of what their application demands cost. But they should never be applied to make a CIO's budget look healthy.

IT-as-a-business proponents are motivated more by ideology than by reason. They see the world as they think it should be, not as it really is. The best IT operations work in the real world for the good of the company's real bottom line.

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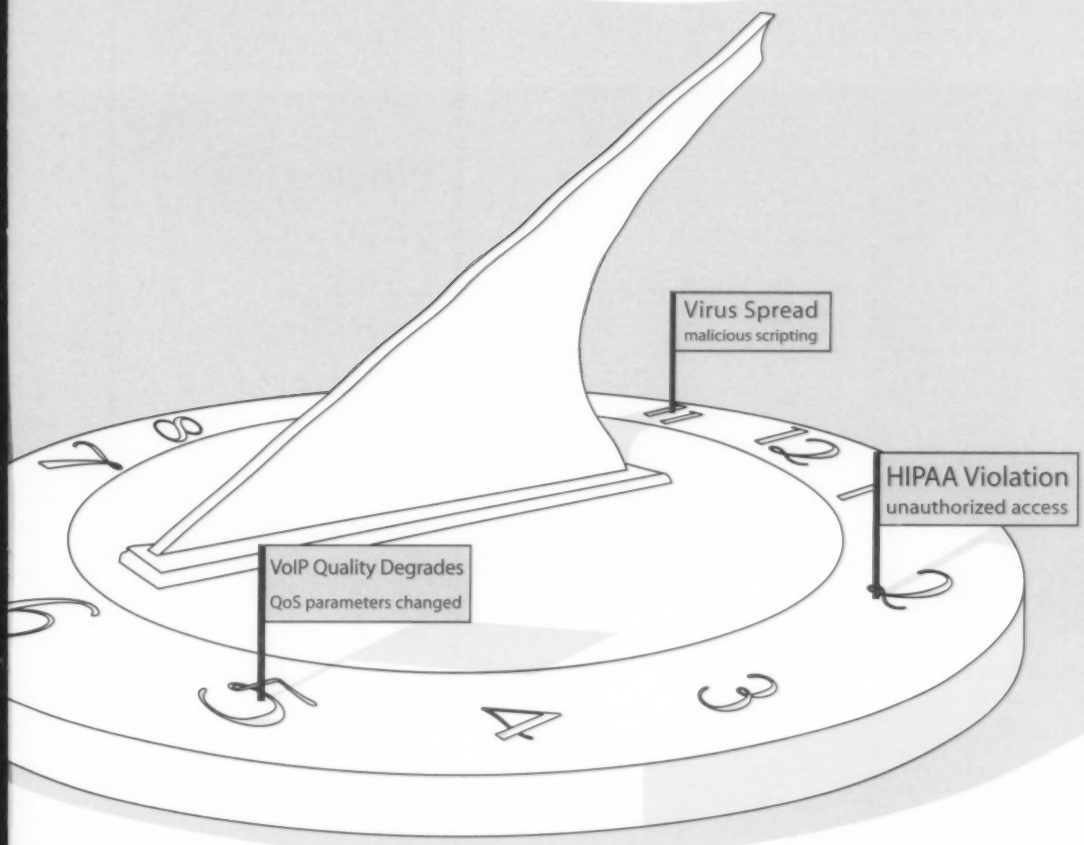

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Social Nets

Trail Blazers had initially projected that 5,000 users would register on the site by the start of the 2007-2008 season in October, he said.

The team joins a growing list of businesses that are embracing Web 2.0 tools such as blogs, wikis and podcasts to create social networks where customers, partners and others can add content and create virtual communities.

Driving Awareness

While such social networks first gained popularity among mostly youthful users who flocked to sites like MySpace and YouTube, businesses are now turning to the technology to boost their brand appeal and sales while gathering feedback to use in the development of new products.

For example, General Motors Corp. and The Procter & Gamble Co. launched social networks in the past two weeks for their Pontiac and Old Spice brands, respectively.

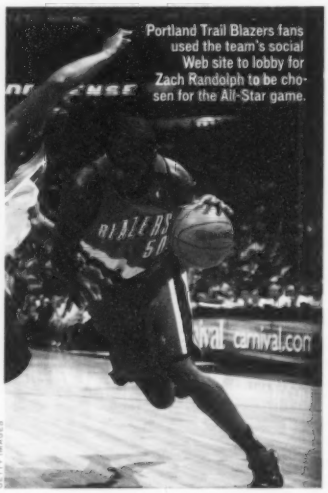
Web 2.0 technology "drives the drumbeat of awareness," Sasse said. "It is a good, old-fashioned grass-roots organization. The more authentic the connection, the more powerful [it] is."

Sasse noted that the Portland, Ore., National Basketball Association franchise turned to the new tools after its earlier strategy of communicating with fans through e-mails faltered when more and more messages were being left unopened.

The American Society for the Prevention of Cruelty to Animals last month launched a partnership with Squidoo LLC, which provides a platform for building Web 2.0 sites, said Jo Sullivan, senior vice president of development and communications at the New York-based organization. The joint effort allows pet owners to build personal Web pages on the ASPCA site that can point to blogs, RSS feeds and other destinations, she said.

Sullivan said that users have created 500 sites and that the ASPCA plans to add daily text messages and podcasts later this year. "It's a great elevation of brand," she said.

Sullivan acknowledged that the effort has posed organizational challenges, forcing the ASPCA to create a new development team with both technology and branding expertise. The technologists are responsible for updating content and identifying emerging Web 2.0 tools, while the communications experts focus on using the tools to improve marketing, Sullivan said.



Portland Trail Blazers fans used the team's social Web site to lobby for Zach Randolph to be chosen for the All-Star game.

GETTY IMAGES

Travelocity.com LP used Web 2.0 tools to create Experience Finder, a new site launched this year to help users choose travel destinations, said Troy Whitsett, vice president of design at the Southlake, Texas-based company.

Travelocity plans to add rich media content and links to its subsidiary IgoUgo.com, a social networking site where travelers post tips on blogs, share photos and offer recommendations for hotels and activities, Whitsett said.

> **[Web 2.0] drives the drumbeat of awareness. It is a good, old-fashioned, grass-roots organization. The more authentic the connection, the more powerful [it] is.**
>
> ART SASSE, VICE PRESIDENT OF COMMUNICATIONS, PORTLAND TRAIL BLAZERS

"The customer wants to hear from other people like themselves," he said.

Eric Kunnen, coordinator of instructional technologies at Grand Rapids Community College in Michigan, said that in recent months, the college has implemented several Web 2.0 tools, such as social bookmarking and customized instant messaging tools for students.

F5 Networks Inc., a Seattle-based maker of security tools, has been enhancing its user community site with Web 2.0 social networking tools for the past 15 months, said Jeff Browning, F5's director of product management. The site, called DevCentral, has more than 13,000 members from various IT disciplines, including systems and networking professionals and application developers, he said.

DevCentral offers blogs, forums, wikis and video syndicated into RSS feeds that generate valuable feedback for F5 about its products, Browning said.

MacDonnell Ulsch, a technology risk management and privacy analyst at the Boston office of consulting firm Jefferson Wells International Inc., cautioned that many companies are rushing to use technologies like blogs without adequately assessing the risks.

"Companies are scaling the technologies among the workforce without understanding the risk or the legal implications," he said. "What do you really gain if you improve your business processes, [but] in doing that, you actually create more risk?"

Companies May Face Lawsuits if Employees Abuse Web 2.0 Tools

Legal risks grow with increased use of social networks

BY HEATHER HAVENSTEIN

As companies increasingly use blogs, wikis, podcasts and other Web 2.0 tools to form social networking sites for customers, partners and employees, top executives must keep track of the new medium's myriad legal risks.

According to several lawyers who specialize in technology issues, information posted on corporate blogs or wikis could lead to lawsuits charging the sponsoring companies with libel, copyright infringement or trademark violations.

They said that certain notes posted on such sites could also violate state or federal securities laws.

Dennis Kennedy, a lawyer in St. Louis who specializes in IT issues, said that companies often — and unwisely — treat emerging Web 2.0 technologies like "isolated new phenomena" that aren't directly tied to corporate operations.

"You need to look at what employees are doing . . . in the context of your communications policy," Kennedy said.

Robert Clothier, an attorney at Fox Rothschild LLP in Philadelphia, noted that the legal risks associated with blogs are higher for posts written by a company's employees than they are for those sent in by non-employees such as customers or partners.

Companies are not likely to be sued for libel for posts on corporate blogs by outside users unless the company significantly alters the meaning of the content, said Clothier, who specializes in First Amendment issues.

Tip Sheet

Attorney Robert Clothier recommends taking the following steps to avoid Web 2.0 lawsuits:

- **Establish strict policies listing which employees can post on a corporate blog and what subjects they can write about.**
- **Assign an employee to monitor blogs to make sure that policies are followed.**
- **Discipline employees who violate corporate blog policies.**
- **Remove inaccurate blog items, and post corrections when needed.**
- **Determine whether the company needs libel insurance, and if so, what kind.**

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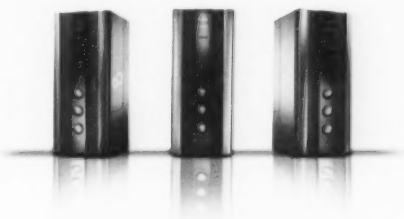

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FRANK HAYES ■ FRANKLY SPEAKING

Laughing Matters

FOR pure entertainment value, the best show in the IT business today is Microsoft. There are lawsuits, like the one in Iowa that was just settled — though not before it turned up a memo from Windows guru Jim Allchin saying he preferred a Macintosh. There are Vista snafus, like the critical security hole in Vista's anti-malware system. There's clumsy astroturfing, like Microsoft's failed try at rewriting Wikipedia the Redmond way.

And last week, there was an "open letter" from Microsoft complaining that IBM is stifling user choice by slowing down standardization of Office 2007's document format, Open XML.

OK, that one's not really so entertaining except to hard-core standards geeks. For them, it's pretty funny stuff.

Put simply, the letter signed by two Microsoft managers accuses IBM of playing politics within the international standards group ISO and of trying to prevent Open XML from quickly becoming an ISO standard. The Microsoft guys are deeply offended that a vendor would try to use a standards process to its own advantage and are shocked — shocked! — that IBM would prevent users from getting the benefits of Open XML.

So, what's funny? The obvious thing is that Open XML is already in Office 2007. Neither IBM nor the ISO could prevent any customer who wants the benefits of Open XML from using it.

The not-so-obvious howler — except to standards geeks — is Microsoft's deep offense that a vendor would try to get an advantage from a standards process. Standards geeks know that *all* vendors do that. Always have, always will — Microsoft and IBM included. That's why it usually takes so long for groups like the ISO to produce a standard. Every vendor gets to pore over the specification and object to anything that would put it at a disadvantage.

There *is* a special fast-track process that can speed up approval for standards that are well understood, widely used and utterly noncontroversial. And, wouldn't you know it, that's the process Microsoft is trying to use to get quick ISO approval for its 6,000-page specification for Open XML, which only exists in a brand-new product from a single vendor.

Chuckling yet?

Microsoft picked the fast track for Open XML because otherwise it could take years for it to become an ISO standard. Other vendors would get to study the spec and suggest tweaks, and by the time it got the ISO's stamp of approval, Open XML might even be available in products that compete with Microsoft Office.

And already-ISO-approved formats such as OpenDocument (which IBM likes and Microsoft loathes) would have a years-long head start with customers that want ISO-standard documents — customers like Massachusetts, which Microsoft lobbied unsuccessfully to accept Open XML.

Got all that? Trust me, for standards geeks, this is hi-larious.

For regular IT types, it all sounds meaningless. And it is. For us, here's what matters:

Real standards make products from different vendors more interchangeable.

That means we can dump Vendor A's sorry excuse for a product and replace it with one from Vendor B or Vendor C or anyone else with something that's a drop-in replacement.

With real standards, we can keep vendors from locking us into their products with proprietary protocols or formats or connectors. We can bargain down prices by leveraging competition. We can choose our own IT future.

But that only happens when there are plenty of competing products that all use the standard in the same way, so they all interoperate and can be swapped out — think PCs or TCP/IP. That's when we get real choice and bargaining power.

Remember that the next time someone protests mightily about some standards issue. Ask this: Will this mean I'll get more choice, more buying leverage and more control?

If it does, it's something you have a stake in. If not — hey, sit back and enjoy the show! ▸

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at **frank_hayes@computerworld.com**.

Unclear on the Concept

This accountant is in charge of IT for his division at this bank, but he has no IT experience – and sometimes it shows. "He announces at a business continuity planning meeting that instead of sending his bookkeepers to an off-site location to test the disaster recovery procedures, he wants them to remote into the PCs at the other site to complete their tests," sighs an IT manager pilot fish. "He says that it will make testing easier. My question: If that's how he wants to handle disaster recovery testing, why not just set up VPN connections in everyone's home? Wouldn't that make it easier for them than having to come to work each morning?"

Same Idea

Programmer complains to support pilot fish that his laptop won't shut down. Let me try, says fish, who presses the power button on the laptop's keyboard and holds it down for a few seconds – and the laptop shuts down. Fish explains that it's supposed to work that way, to prevent an accidental button-push from wiping out hours of work. "OK," replies aggravated programmer, "but why doesn't my laptop shut down when I turn off the switch on the power strip?"

IT Spoken Here

Pilot fish gets an e-mail from his mother-in-law, who's trying to watch a basketball game online. "She got an error message about a problem with a plug-in," says fish. "In her e-mail, she explained that she had shut down the computer and re-plugged-in the mouse, keyboard, monitor, power and network cables three times. She knows she's plugging them into the right connectors because I color-coded everything on the back of the PC when they first got it. She was asking what she should do next."

Not So Easy

Newly hired IT tech pilot fish at an engineering company gets called to the boss's office – he's having trouble connecting to the VPN with his laptop, and his Treo needs to be continuously updated, too. Much troubleshooting, experimenting and fixing later, everything seems to be working. Then the boss has one more request: "I need you to write out instructions on how to fix these kinds of problems if they come up again. I don't want to have to rely on you to fix it all the time." Sighs fish, "I told him I'd get right on it. Lucky for me, he's never asked for that document again."

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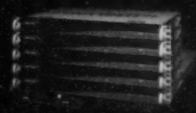

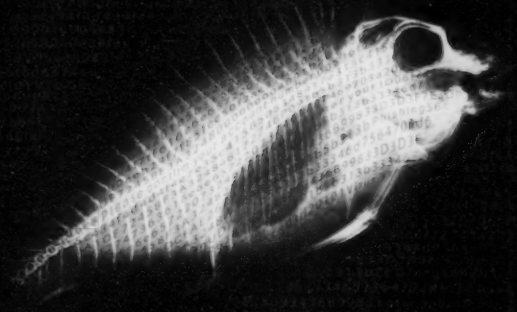

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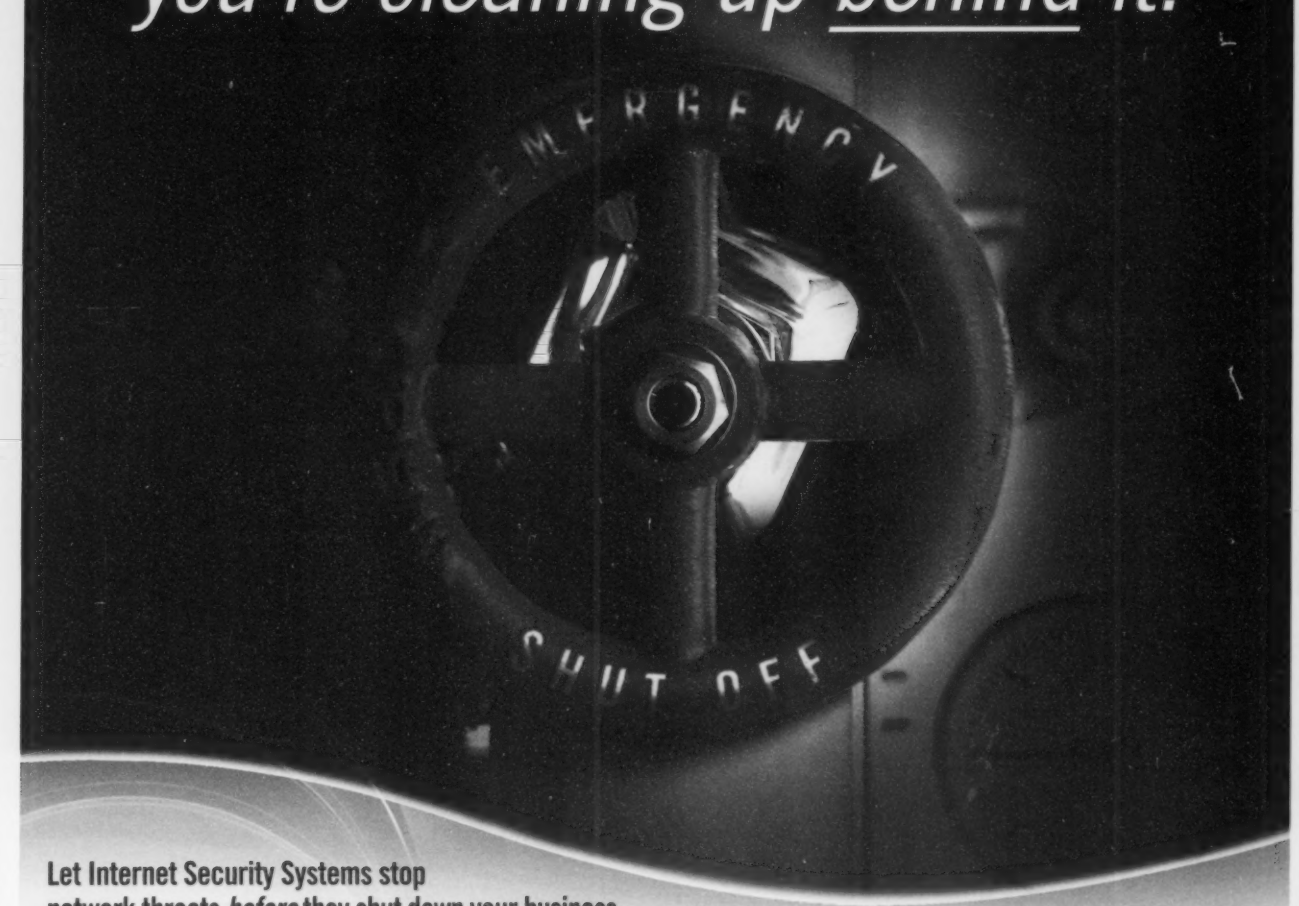

Let Internet Security Systems stop network threats *before* they shut down your business.

How do you ensure compliance and manage costs when your security is less than certain? Even "zero-day" solutions aren't fast enough to protect against losses once an Internet attack hits. The alternative is preemptive security from Internet Security Systems (ISS). Because our enterprise solutions are based on the world's most advanced vulnerability research, only ISS can offer preemptive security and stop threats *before* they impact your business. **So why rely on "reaction" when security can be a sure thing?**

Need proof? Get a free whitepaper, *Preemptive Security: Changing the Rules,* at www.iss.net/proof or call today at 800-776-2362.

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